



COUNTY BOROUGH OF BOURNEMOUTH.  
1908.

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**ANNUAL REPORT**

OF THE

MEDICAL OFFICER OF HEALTH

WITH WHICH ARE INCLUDED THE REPORTS OF THE

BOROUGH BACTERIOLOGIST

AND

CHIEF SANITARY INSPECTOR,

ALSO THE REPORTS OF THE

PUBLIC ANALYST AND FOOD  
INSPECTOR.

Re SALE OF FOOD AND DRUGS ACT.

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# County Borough of Bournemouth.

## ANNUAL REPORT OF THE MEDICAL OFFICER OF HEALTH.

MEDICAL OFFICER OF HEALTH DEPARTMENT,  
BOURNEMOUTH,

*February, 1909.*

TO THE MAYOR AND TOWN COUNCIL,  
BOURNEMOUTH.

GENTLEMEN—

I have the honour to submit my Annual Report on the health of the County Borough of Bournemouth for the year ending December 31st, 1908.

### POPULATION.

There are at the present time 14,154 houses erected in the Borough of Bournemouth, of these 240 are unoccupied or in process of completion. If we take  $5\frac{1}{2}$  persons in each house it will give us a population for the whole Borough of 76,527, and this, in my judgment, would represent the true population of the Borough.

The class of houses at present being erected in Bournemouth are of the villa class, detached and semi-detached. The building efforts are especially evident in all the outlying districts, mainly at Southbourne, Winton and Richmond Park.

For the purposes of this report I shall therefore calculate my Birth and Death rates on the above estimate 76,527.

### ACREAGE.

The area of the Sanitary District of Bournemouth in the year 1856 was 1,140 acres. The area was increased

in the years 1876, 1884, 1895 and 1901, and the area of the County Borough at the present time is 5,850 acres.

On our estimated population of 76,527 this gives 13.08 persons per acre, 1 person per acre higher than last year.

### NEW BUILDINGS.

In the following table I give the number of new buildings erected in the County Borough for the past 10 years. Your Council will note there has been a continual increase in the number of buildings erected each year. This increase mainly occurs in the outlying districts of Winton, Moordown, Pokesdown, and Southbourne :—

Year.	Houses.	Large Additions, Stables, Workshops, and other Buildings.	Total.
1899	130	95	225
1900	174	97	271
1901	200	122	322
1902	294	99	393
1903	436	120	556
1904	440	106	546
1905	479	103	582
1906	493	98	591
1907	522	103	625
1908	549	90	639
Totals	3717	1033	4750

### BIRTH RATE.

The total number of Births registered in the district was :—

Boys.	Girls.	Total.
581	539	1120

The birth rate per 1,000 on a population of 76,527 is only 14.73 per 1,000, truly a low rate when compared with that of the whole country. This already indicates that a large proportion of the inhabitants living in Bournemouth are above the child-bearing age and means that a large portion of the population seek the advantages of this town for the close of their life. I am of opinion, however, that the birth rate in the Artisan and working class districts is fully up to the average of that of the whole country.

## DEATH RATE.

The total number of deaths registered from all causes within the County Borough was 934, which on my estimate of population of 76,527, gives a death rate of 12·19 per 1,000.

These deaths are made up as follows :—

Visitors	206	Death Rate	2·68 per 1,000
Residents	728	„	9·51 „
Total	934	„	12·19 „

The deaths for the two classes for the past six years are as follows :—

	1903.	1904.	1905.	1906.	1907.	1908.
Deaths of Visitors ...	196	260	227	191	208	206
Do. Residents...	554	612	609	780	619	728
Totals ...	750	872	836	971	827	934

You will note that there has been a considerable increase in the total number of deaths during the past year as compared with the year 1907. In both classes there has been an increase.

I herewith append a tabulated statement for the year 1908, showing the annual death rate per 1,000 from all causes, and from certain epidemic diseases. These may be contrasted with the returns from our own County Borough:—

	Birth Rate.	Death Rate.		Principal epidemic Diseases Cols. 5-11.	Annual rate per 1000 living.						Deaths under 1 year to 1000 Births.	
		Crude.	Correctd		Small Pox.	Scarlet Fever.	Diph- theria.	Whoop- ing Cough.	Fever.	Diar- rhea.		
Columns.	1	2	3	4	5	6	7	8	9	10	11	12
England & Wales	26·5	11·7	11·7	1·29	0·00	0·22	0·08	0·15	0·27	0·07	0·50	121
76 Great Towns	27·0	11·9	11·8	1·59	0·00	0·31	0·10	0·16	0·29	0·08	0·65	128
142 Smaller Towns ..	26·0	11·0	11·7	1·26	0·00	0·20	0·06	0·15	0·25	0·08	0·52	124
England and Wales less the 218 Towns ..	26·2	11·7	11·8	0·99	0·00	0·13	0·06	0·15	0·25	0·07	0·33	110
Bournemouth ..	11·73	12·19	12·19	0·30	0·00	0·03	0·02	0·14	0·06	0·02	0·03	94

The following table will shew the rate per 1,000 of the deaths due to various causes for the past five years:—

DISEASE.			1904.	1905.	1906.	1907.	1908.
Small-pox ...	...	...	·0	·0	·0	·0	·0
Measles ...	...	...	·0	·03	·1	·0	·03
Scarlet Fever ...	...	...	·0	·01	·0	·01	·01
Whooping Cough ...	...	...	·0	·03	·1	·0	·06
Diphtheria & Membranous Croup			·01	·22	·07	·09	·14
Croup ...	...	...	·0	·0	·0	·0	·0
Fevers {	Typhus ...	...	·0	·0	·0	·0	·0
	Typhoid or Enteric Fever		·0	·01	·0	·02	·02
	Other continued ...	...	·0	·0	·0	·0	·0
Epidemic Influenza ...	...	...	·0	·06	·05	·04	·02
Cholera ...	...	...	·0	·0	·0	·0	·0
Plague ...	...	...	·0	·0	·0	·0	·0
Diarrhoea ...	...	...	·02	·18	·2	·08	·03
Enteritis ...	...	...	·01	·06	·1	·06	·11
Puerperal Fever ...	...	...	·0	·0	·0	·0	·01
Erysipelas ...	...	...	·0	·01	·0	·01	·0
Other Septic Diseases		...	·0	·0	·0	·0	·0
Phthisis ...	...	...	2·28	2·09	1·46	1·53	1·64
Other Tubercular Diseases		...	·59	·48	·4	·48	·57
Cancer (malignant Disease)		...	1·12	1·10	1·07	·85	1·08
Bronchitis ...	...	...	·78	·51	·7	·63	·65
Pneumonia ...	...	...	·78	·62	1·07	·72	·96
Pleurisy ...	...	...	·0	·01	·1	·02	·02
Other Diseases of Respiratory Organs ...	...	...	·00	·0	·0	·0	·0
Alcoholism: Cirrhosis of Liver		...	·01	·24	·1	·05	·15
Venereal Disease ...	...	...	·0	·03	·04	·01	·01
Premature Birth ...	...	...	·6	·45	·67	·52	·5
Diseases & Accidents of Parturition		...	·0	·1	·08	·06	·10
Heart Disease ...	...	...	2·1	2·16	2·45	1·95	1·94
Accidents ...	...	...	·23	·27	·41	·24	·34
Suicides ...	...	...	·0	·1	·08	·09	·05
All other Diseases ...	...	...	4·09	3·81	4·58	3·78	3·76

#### Death Rate per 1,000 at various ages for the past 10 years.

	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1908.
Deaths under one year	2·6	1·47	1·68	1·94	1·5	1·92	1·39	2·11	1·28	1·39
Over 1 year & under 5	·7	·74	·34	·87	·66	·67	·66	·85	·46	·85
" 5	15	·32	·44	·42	·35	·31	·43	·56	·53	·22
" 15	25	·91	·91	·82	·84	·90	·84	·87	·65	·65
" 25	65	5·01	5·05	5·42	4·77	5·15	5·89	5·30	5·52	4·65
" 65 and upwards	3·34	2·86	3·00	3·54	3·31	3·81	3·86	4·49	4·02	3·60
Totals	12·8	11·47	11·68	12·29	11·83	13·56	12·64	14·15	11·28	12·26



In 1904 the total deaths under 1 year of age were	123
„ 1905	92
„ 1906	145
„ 1907	94
„ 1908	106

Of these 33 were of premature births, many only living a few minutes or days.

Number of suicides in 1904	...	...	4
„ 1905	...	...	7
„ 1906	...	...	6
„ 1907	...	...	7
„ 1908	...	...	4

Deaths from injuries 1904	...	...	15
„ 1905	...	...	18
„ 1906	...	...	28
„ 1907	...	...	18
„ 1908	...	...	26

The deaths recorded in the public and charitable institutions of the town during the past five years were as follows:—

Name of Institution.	Persons belonging to the District.					Persons not belonging to the District.					Totals for year.				
	1904	1905	1906	1907	1908	1904	1905	1906	1907	1908	1904	1905	1906	1907	1908
Sanitary Hospital ..	10	15	9	5	14	2	0	1	2	1	12	15	10	7	15
Sanatorium, B'mouth..	0	1	1	0	0	2	4	4	2	2	2	5	5	2	2
Royal Victoria Hospital	14	22	21	18	14	22	18	17	19	19	36	40	38	37	33
Firs Home ..	1	1	2	3	2	19	13	15	13	13	20	13	17	16	15
Royal Boscombe and West Hants Hosp'l..	20	16	29	25	31	8	4	12	13	17	28	20	41	38	48
St. Joseph's Home ..	2	1	0	0	0	3	4	0	4	1	5	5	0	4	1
Herbert Home ..	0	0	0	0	0	2	2	3	0	1	2	2	3	0	1
Hahnemann Home ..	0	0	0	0	0	4	0	0	0	0	4	0	0	0	0
Springb'rne O'phnage..	0	1	1	0	0	1	0	0	0	0	1	1	1	0	0
Home of Good Hope ..	0	1	11	3	3	11	3	7	6	5	11	4	18	9	8
House Beautiful Con- valescent Home ..	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Victoria Home for Nurses ..	1	0	3	0	3	7	2	2	3	2	8	2	5	3	5
Cripples' Home ..	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0
Sanatorium, Pokesdown	0	0	3	0	1	3	7	0	3	9	3	7	3	3	10
Convent of the Cross, Pokesdown ..	0	0	0	0	1	0	1	0	0	0	0	1	0	0	1
St. Luke's Home, Pokesdown ..	0	0	0	1	0	2	0	0	1	0	2	0	0	2	0
Totals ..	48	58	80	55	69	86	57	63	66	70	134	115	143	121	139

Of the total number of deaths recorded during the past year, I note there were 194 deaths of persons at 70 years of age and upwards. There has been a slight decrease compared with the number in the previous year, this can be seen in the following table. Sixty-six of the deaths recorded were in old persons of 80 years of age and upwards. The greatest age of death recorded was 97. The climatic conditions in the winter are very suitable to old people, and encourage an ever-increasing number of elderly people to come into the town for residence and enjoy the benefits of our climate in their retirement.

		1904.	1905.	1906.	1907.	1908.
At 70 years of age	...	14	11	14	11	13
„ 71	„	7	11	13	19	8
„ 72	„	16	14	23	16	19
„ 73	„	9	9	6	14	14
„ 74	„	12	21	12	10	14
„ 75	„	13	16	14	15	10
„ 76	„	8	12	16	12	10
„ 77	„	14	11	11	15	15
„ 78	„	9	10	13	12	11
„ 79	„	9	13	11	5	11
„ 80	„	6	8	16	13	6
„ 81	„	8	9	10	9	9
„ 82	„	11	6	12	11	13
„ 83	„	11	6	11	15	9
„ 84	„	7	7	9	9	4
„ 85	„	12	3	11	6	6
„ 86	„	6	11	9	6	3
„ 87	„	2	1	11	1	7
„ 88	„	2	0	4	4	4
„ 89	„	2	4	2	3	0
„ 90	„	3	4	1	3	3
„ 91	„	0	1	2	1	2
„ 92	„	0	1	0	1	0
„ 93	„	0	1	0	0	2
„ 94	„	0	1	5	1	0
„ 95	„	0	0	0	1	3
„ 96	„	0	0	0	11	0
„ 97	„	0	1	0	0	1
„ 98	„	0	0	1	0	0
„ 99	„	0	0	0	0	0
„ 100	„	0	1	0	0	0
Totals	...	181	189	246	225	194



The following table gives particulars of population, births and deaths, etc., for the past eleven years for the whole district :—

(No. 1 Table. L.G.B.)

Year.	Popula- tion esti- mated to Middle of each Year.	Births.		Total Deaths register'd in the District.				Total Deaths in Public In- stitutions in the District.	Deaths of Non-residents registered in the District.	Deaths of Residents regis- tered in Public Institu- tions beyond the District.	Net Deaths at all ages belonging to District.	
				Under 1 year of age.		At all Ages.					No.	Rate*
		No.	Rate*	No.	Rate per 1000 Births Regis- tered.	No.	Rate*					
1	2	3	4	5	6	7	8	9	10	11	12	13
1898	55288	713	13·0	91	127·3	630	11·6	84	238	NOT RECORDED.	392	7·0
1899	58480	754	13·0	120	159·1	722	12·3	99	216		506	8·6
1900	60104	724	12·4	89	122·9	692	11·5	98	189		503	8·3
1901	59625	1127	18·9	107	94·9	701	11·6	85	183		372	7·91
1902	61628	992	16·11	120	120·9	759	12·31	78	206		553	8·97
1903	63000	1111	17·6	95	85·5	750	11·92	90	196		554	8·79
1904	64000	1101	17·2	123	111·7	872	13·62	134	260		612	9·56
1905	66000	1110	16·3	92	82·8	836	12·66	115	227		609	9·23
1906	67700	1197	17·68	145	121·1	971	14·34	143	191		780	11·52
1907	73441	1206	16·52	94	77·94	827	11·32	121	208		619	8·48
Averages for Years 1898-1907.	62926	1003	15·87	107	110·41	776	12·31	104	211		550	9·83
1908	76527	1120	14·73	106	94·64	934	12·19	139	206		728	9·51

\* Rates in columns 4, 8, and 13 calculated per 1,000 of estimated population.

The following table gives causes and ages of all deaths during the year 1908, in the whole County Borough :—

(TABLE No. 4, L.G.B.)

		Deaths at the subjoined ages: —							Total deaths whether of Residents or Non-Residents in Public Institutions in the district.
Causes of Death.		All ages.	Under 1 year.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.	
Small-pox	...	—	—	—	—	—	—	—	—
Measles	...	3	1	2	—	—	—	—	—
Scarlet fever	...	2	—	1	—	—	1	—	1
Whooping-cough	...	5	4	1	—	—	—	—	—
Diphtheria (incl'd'ng membranous croup	...	11	—	6	4	—	1	—	9
Croup	...	—	—	—	—	—	—	—	—
Fever	{ Typhus...	—	—	—	—	—	—	—	—
	{ Enteric...	2	—	—	—	—	2	—	1
	{ other continued...	—	—	—	—	—	—	—	—
Epidemic influenza	...	2	—	1	—	—	—	1	—
Cholera	...	—	—	—	—	—	—	—	—
Plague	...	—	—	—	—	—	—	—	—
Diarrhœa	...	3	3	—	—	—	—	—	—
Enteritis	...	9	6	1	1	—	1	—	1
Puerperal fever	...	1	—	—	—	—	1	—	1
Erysipelas	...	—	—	—	—	—	—	—	—
Phthisis (Pulmonary Tuberculosis)	...	125	—	1	3	21	95	5	29
Other tubercular diseases	...	41	2	10	4	3	21	1	9
Cancer (malignant disease)...	...	82	—	—	—	—	49	33	13
Bronchitis	...	50	3	3	—	—	15	29	2
Pneumonia	...	73	13	17	—	2	22	19	8
Pleurisy	...	2	—	—	—	—	2	—	—
Other diseases of Respiratory organs	...	—	—	—	—	—	—	—	—
Alcoholism, { Cirrhosis of liver }	...	12	—	—	—	—	9	3	—
Venereal disease	...	1	—	—	—	1	—	—	2
Premature birth	...	38	37	—	1	—	—	—	—
Diseases & accidents of parturition	...	8	3	—	—	—	5	—	11
Heart disease	...	118	5	1	3	7	70	62	9
Accidents	...	26	2	4	—	6	12	2	—
Suicides	...	4	—	—	—	—	4	—	1
All other causes	...	286	27	17	6	12	105	119	43
All causes	...	934	106	65	22	52	415	274	139

The total deaths from Diarrhœa in the County Borough still continue to remain at a very low figure. In no way can it be said that this complaint causes any appreciable increase in the death rate. This is in marked contrast to many other of the large towns in the United Kingdom and perhaps indicates that parents are more careful in the dieting and bringing up of their infants in Bournemouth than in some other places.

In respect to the total number of deaths from Phthisis there has been a slight increase, these deaths mainly occur in the public institutions amongst the visitor class, many of whom come here in a moribund and hopeless condition. It seems to me that medical men in various parts of the country are wrong in thinking that the climate of Bournemouth is so beneficial as to be likely to help these poor sufferers who are so obviously in the last stage of the disease that any climatic conditions, however favourable, could or would be beneficial to them, is misleading. They are, on arrival, so obviously in a moribund condition and should never have come. Perhaps more care might be exercised by our own profession in refusing to take the responsibility of these poor sufferers, or to hold out any delusive hopes of benefit being obtained. That the climate and advantages of Bournemouth have been proved over many years to be so beneficial to many in the earlier stages of this complaint cannot be denied. In many the disease has become arrested and many have overcome the early threatenings of this complaint, and which cases, if left in unfavourable environments, the disease soon gains a headway. I hope this fact will become more recognised year by year and duly acted on, and thus save us from having to deal with these cases which are so hopeless.

The deaths recorded as from Cancer have increased as compared with last year. On analysing the death records of this complaint, I am again impressed with the fact that some portion of the alimentary canal seems to be that portion of the human body which this fell disease seems to be most prone to effect. Of the total number of 82 deaths recorded, in no less than 54 of them the

disease manifested itself in some portion of the alimentary canal, or some one of the organs connected with digestion. If a wider and a wiser attention could be directed to this fact generally throughout the world a clue perhaps might be obtained as to some of the possible causes of this scourge.

(TABLE No. 5, L.G.B.)

## INFANTILE MORTALITY during the year 1908.

Deaths from stated causes in Weeks and Months  
under One Year of age.

Cause of Death.		Under 1 Week.	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 1 Month.	1-2 Months.	2-3 Months.	3-4 Months.	4-5 Months.	5-6 Months.	6-7 Months.	7-8 Months.	8-9 Months.	9-10 Months.	10-11 Months.	11-12 Months.	Total Deaths Under One year
All Causes	(Certified ...	28	7	3	4	42	13	7	5	2	3	4	5	4	3	2	5	95
	(Uncertified	4	...	...	1	5	1	...	4	...	...	...	1	...	...	...	...	11
Common Infectious Diseases	Small-pox ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Chicken-pox	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Measles ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
	Scarlet Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
	Diphtheria	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	(including Membranous Croup)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Whooping Cough	...	...	...	...	...	2	...	...	1	...	1	...	...	...	...	...	4
Diarrhœal Diseases	Diarrhœa, all forms	...	...	...	...	...	...	1	2	...	...	...	...	...	...	...	1	4
	Enteritis, Muco-enteritis Gastro-enteritis	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
	Gastritis, Gastro-intestinal Catarrh	...	...	...	...	...	2	...	...	...	...	...	...	...	1	...	...	3
	Premature Birth	18	3	...	3	24	3	...	2	...	...	...	...	1	...	...	...	30
Wasting Diseases	Congenital Defects	1	1	...	...	2	3	...	...	...	...	...	...	...	1	...	...	4
	Injury at Birth	6	...	...	...	6	...	...	...	...	...	...	...	...	...	...	...	6
	Want of Breast Milk Starvation	1	...	...	1	2	1	...	...	...	...	...	...	...	...	...	...	3
	Atrophy, Debility, Marasmus	...	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...	2
	Tuberculous Meningitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tuberculous Diseases	Tuberculous Peritonitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Tabes Mesenterica	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Other Tuberculous Diseases	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1
	Erysipelas ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other Causes	Syphilis ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Rickets ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Meningitis not tuberculous	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Convulsions	2	...	1	1	4	...	2	...	1	1	1	3	...	...	...	1	13
	Bronchitis...	...	1	1	...	2	1	...	...	...	...	...	...	1	...	...	...	4
	Laryngitis...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Pneumonia	...	...	1	...	1	...	4	3	...	...	1	...	1	1	...	2	13
	Suffocation, overlying	2	...	...	...	2	1	...	1	...	...	...	...	...	...	...	...	4
	Other Causes	2	2	...	...	4	...	...	...	...	2	...	2	1	...	1	...	10



## INFECTIOUS DISEASE.

The total number of deaths due to notifiable disease for the past five years was as follows :—

Year.	Small Pox.	Diphtheria.	Scarlet Fever.	Typhoid.	Ery.	Puer- neral Fever.	Total.	Death Rate.
1904	0	7	1	1	4	1	14	·21
1905	0	15	1	1	1	0	18	·27
1906	0	5	0	2	1	0	8	·11
1907	0	7	1	2	1	0	11	·15
1908	0	11	2	2	0	1	16	·22

The deaths from notifiable diseases remain very low, and afford conclusive testimony to the general healthiness of the Borough.

There were two deaths from Enteric Fever during the year, particulars of these deaths are as follows :—

(1) A.S.H.M., AGED 37 YEARS.—This patient ate oysters obtained from a Fishmonger who purchased them from a Fish Hawker from a neighbouring Borough.

(2) F.H., AGED 26 YEARS.—Hotel servant, died from perforation and hæmorrhage.

## NOTIFIED CASES OF INFECTIOUS DISEASE.

The following table will show the total number of cases notified in the months of the past year :—

Month notified.	Scarlet Fever.	Diphtheria.	Enteric Fever.	Variola.	Erysipelas.	Membranous Croup.	Puer- neral Fever.	Continued Fever.	Relapsing Fever.	TOTALS for each Month.
January ...	6	1	—	—	1	—	—	—	—	8
February ...	5	6	—	—	1	—	—	—	—	12
March ...	8	6	2	—	3	—	—	—	—	19
April ...	7	6	—	—	3	—	1	—	—	17
May ...	11	3	—	—	2	—	—	—	—	16
June ...	4	4	1	—	1	—	—	—	—	10
July ...	3	4	1	—	2	—	—	—	—	10
August ...	2	5	—	—	1	—	—	—	—	8
September ...	9	5	1	—	5	—	—	—	—	20
October ...	8	7	—	—	1	—	—	—	—	16
November ...	8	29	1	—	2	—	—	—	—	40
December ...	8	32	—	—	2	—	2	—	—	44
Totals...	79	108	6	—	24	—	3	—	—	220



The following table will shew the number of cases notified and treated in the Sanitary Hospital during the year, classified according to ages:—

(Table No. 3 L.G.B.)

Notifiable Disease.	At all Ages.	Cases notified in whole district. At Ages—Years.						Total cases removed to Hospital.
		Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 65.	65 and upwards.	
Small-pox ...	—	—	—	—	—	—	—	—
Cholera ...	—	—	—	—	—	—	—	—
Diphtheria and Membranous croup) ...	108	—	24	68	7	9	—	99
Erysipelas ...	24	—	1	1	2	20	—	2
Scarlet fever ...	79	1	7	46	21	4	—	73
Typhus fever ...	—	—	—	—	—	—	—	—
Enteric fever ...	6	—	—	1	—	5	—	2
Relapsing fever	—	—	—	—	—	—	—	—
Continued fever	—	—	—	—	—	—	—	—
Puerperal fever	3	—	—	—	1	2	—	—
Plague ...	—	—	—	—	—	—	—	—
Total ...	220	1	32	116	31	40	—	176

The following table will show the notified cases nursed at home or treated in the Isolation Hospital, and the number of deaths:—

Disease.	At all Ages.	Removed to Sanitary Hospital.	Nursed at Home.	Total Deaths.	Died in Hospital.	Died at Home.
Small-pox ...	—	—	—	—	—	—
Cholera ...	—	—	—	—	—	—
Diphtheria ...	108	99	9	11	9	2
Membranous Croup...	—	—	—	—	—	—
Erysipelas ...	24	2	22	0	0	0
Scarlet fever ...	79	73	6	2	1	1
Enteric fever ...	6	2	4	2	1	1
Relapsing fever ...	—	—	—	—	—	—
Continued fever ...	—	—	—	—	—	—
Puerperal fever ...	3	0	3	2	1	1
Plague ...	—	—	—	—	—	—
Totals ...	220	176	44	17	12	5

## SCARLET FEVER.

79 cases of scarlet fever have been notified in the County Borough during the year. The peculiarity of mildness as alluded to in previous reports still continues, and the type of this disease generally in the district is only of the faintest scarlatinal character.

Two deaths only from scarlet fever have been certified during the year; one died at home and one in the hospital.

73 of the cases notified were at once isolated in the Sanitary Hospital, and every precaution such as disinfection and cleansing was insisted on at the patients' home.

## DIPHTHERIA.

108 cases of so called diphtheria were notified in the town during the year. In many of these cases the clinical evidence was but slight, and it was only by bacteriological test that a diagnosis could be arrived at.

## ENTERIC FEVER.

Six cases of enteric fever have been notified in the Borough during the past year.

The particulars connected with each case are as follows:—

Date notified 1908.	Name.	Age years.	Locality.	Probable cause.
March 6	A.S.H.M.	40	C. Ward	Had eaten oysters purchased from a fishmonger who had recently started business in the town. This patient died at home. There were no insanitary conditions found at his residence and no other assignable cause.
March 24	M.M.	31	E.C. Ward	This case was probably caused by the eating of cockles which had been obtained from Poole.

May 30	F.H.	25	W.C.Ward	Porter at an hotel. No very definite evidence could be elicited of the patient having eaten oysters or cockles. This information for various reasons is often withheld, but the association and occupation of the patient renders it not unlikely that he may have done so.
July 9	W.P.	6	M.P.Ward	No probable cause ascertained. Patient was treated at home.
Sept. 9	G.D.	30	E.C.Ward	A trained nurse who may have contracted the disease in her occupation. Patient was nursed at home.
Nov. 9	C.H.P.	39	S. Ward	Patient was a gentleman who joined a shooting party and partook of oysters at Horsham. His medical attendant attributed his illness to this cause.

### SANITARY HOSPITAL.

During the past year 229 patients have been admitted to the Sanitary Hospital, and of these 15 died.

The following table gives a summary of the patients and diseases treated in the Hospital from the year of its establishment in 1886 to the present time, and in tables 2, 3 and 4 I show the cost of patients and staff during the past five years, as well as a statement of stock and loans relating to the land and buildings connected with the Hospital.

Table showing Number of Cases Treated in the Sanitary Hospital since its establishment in 1886.

Year	Estimated Population	Scarlet Fever.	Diphtheria	Typhoid	Varicella	Other Cases	No. of cases in Quarantine in Cottages.	Deaths	Total of all cases received in Hospital.	(Giving a Death Rate P. of all cases admitted.	Remarks
1886	27,000	21	1		15	8		1 Variola	45	2.22	Hospital established this year. One Pavilion and Administrative Block, and a "Lyons" Steam Disinfecter.
1887	32,025	19	4	1		11		1 Typhoid	35	2.85	
1888	33,025	9	5	1		12		1 Diph.	27	3.70	Quarantine Cottages Purchased.
1889	36,376	10	2	1		8			21		
1890	37,320	3	7	1		6		1 Typhoid	17	5.88	Notification of Infectious Diseases Act adopted.
1891	37,481	35	6	5		6		1 S.F. 1 Typ. 1 Diph.	52	5.77	
1892	Census Yr. 40,000	76	10	4		9		1 Diph. 1 S.F.	99	2.02	Bournemouth Improvement Act passed. Iron Pavilion erected (8 beds).
1893	42,000	257	5	5	4	13	19	3 S.F. 1 Var. 1 Diph.	284	1.76	S. F. very prevalent all over the country. Three Berthon Huts purchased (4 beds).
1894	42,000	106	8	3	14	13	22	1 Variola 1 Diph.	144	1.38	Varicella outbreak in the Springbourne Ward. Three of these 14 cases lived outside the Borough, but were caused by cases in our District.
1895	47,000	92	15	5		6	10	4 S.F. 3 Diph.	118	5.93	New Pavilion opened, giving additional 26 beds.
1896	50,000	89	22	8	1	17	6	2 Diph. 1 Ty. 1 S.F. 1 Bram	137	3.65	
1897	53,008	104	27	6		13		5 S.F. 2 Diph	150	4.9	New Oak floors provided to old block, with additional bath and improved system of heating.
1898	55,000	78	22	7		16		1 Pneumon. 1 Dip. impd.	123	1.75	Berthon Huts re-painted.
1899	58,480	271	77	4		12		11 Deaths (see report)	364	2.8	In addition, 41 cases were treated in the Hospital admitted from Urban District of Pokesdown (26 S. F. and 5 Diph.)
1900	60,104	115	68	1		7		7 Deaths	181	3.8	In addition, 23 cases were admitted from the Urban District of Pokesdown (11 S. F., 11 Diph., and 1 Enteric).
1901	59,625	75	64	16	1	5		7 Dip. 3 En. 1 Variola	167	6.5	Including cases from added Districts.
1902	Census Yr. 61,628	61	72	9	1	35	9	6 Dip. 1 Ery 1 Heart 1 Pneu.	187	4.6	Ditto. Old Pavilion painted.
1903	63,000	122	70	7		21		1 Diph.	220	1.8	
1904	64,000	95	85	12		27	1	6 Dip. 1 S.F. 1 Ery. 3 Pneu. 1 Pith. 15	220	5.4	New Observation Wards being erected, also large additions to administration block. 10 cases of Diph and 1 S. F. were admitted from District of Muford.
1905	66,000	83	110	8		45			261	5.7	Observation Wards completed and used. Administrative block. Alterations completed, grounds re-modelled and altered.
1906	67,700	78	100	9		50			237	8.4	13 cases admitted from the Districts of Poole, Christchurch, Branksome, Hordle and Canford.
1907	73,000	90	79	12		25			206	3.3	Several cases were admitted from outside the District.
1908	76,527	85	102	2		36	4		229	6.5	9 cases were admitted from outside the District. 12 cases were admitted from outside the District.



Sanitary Hospital Expenditure, &c., for years 1904, 1905, 1906, 1907, 1908.

Month	Total Expenditure, including Repairs, Wages, &c.										Expenditure on Provisions only.						Daily Average Number of Persons per Month, inclusive of staff.				Average Cost per Head per Day.									
	1904.		1905.		1906.		1907.		1908.		1904.		1905.		1906.		1907.		1908.		1904.		1905.		1906.		1907.		1908.	
	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	
JANUARY ..	196	18	2	232	11	3	220	10	6	284	11	5	211	3	9	62	5	2	60	19	6	47	3	5	65	5	1	54	10	6
FEBRUARY ..	189	12	2	216	9	9	192	15	11	206	11	4	207	10	6	60	1	8	60	17	9	45	14	10	54	16	6	51	3	2
MARCH ..	171	6	6	364	14	10	356	19	0	337	4	5	287	14	8	51	12	7	57	6	5	55	5	2	76	16	8	50	7	8
APRIL ..	198	2	4	147	10	0	171	17	3	186	8	5	145	1	5	47	17	11	59	3	0	50	18	3	58	11	4	47	1	11
MAY ..	190	13	0	222	13	8	191	5	3	272	0	10	229	5	10	45	10	8	60	5	1	52	3	3	49	1	1	47	12	10
JUNE ..	217	7	7	225	3	7	193	3	9	248	16	4	285	17	5	42	7	7	57	5	5	43	15	5	50	11	2	56	18	2
JULY & AUGUST ..	434	19	9	206	10	6	295	7	1	201	6	6	212	5	10	78	0	8	116	6	7	87	5	8	47	9	1	48	14	0
SEPTEMBER ..	77	3	8	246	19	5	238	3	7	215	1	5	229	14	7	44	12	0	49	15	4	46	14	4	57	18	1	57	3	8
OCTOBER ..	151	8	4	171	16	11	151	8	8	233	17	3	164	8	5	46	2	9	44	12	7	55	3	0	53	19	4	53	16	3
NOVEMBER ..	227	12	5	210	19	8	241	13	11	186	11	5	227	2	9	56	4	8	56	9	6	69	4	9	60	5	11	72	2	5
DECEMBER ..	211	1	7	196	3	1	231	3	10	201	15	8	228	18	6	66	0	11	52	19	9	81	6	0	49	16	2	68	15	7
TOTALS	2266	5	6	2529	12	8	2484	8	9	2797	15	3	2539	15	7	600	16	7	676	0	11	634	14	1	679	14	10	634	6	5

## No. 3.

## Comparative Statement for 5 Years.

Year.	Average Number of persons, inclusive of Staff in Hospital per day.	Total average cost per person per day, which includes all administrative expenses.	Average cost per person per day for provisions alone, including stimulants.	Amount paid by Patients to Borough Treasurer.	Total Expenditure for the year after deducting receipts from patients.
		£ s. d.	£ s. d.	£ s. d.	£ s. d.
1904	41·9	2 11½	8½	292 3 3	1974 1 10
1905	44·79	3 1	9½	392 8 3	2137 4 5
1906	39·57	3 5½	10½	259 12 11	2224 15 10
1907	40·34	3 9½	11	447 2 2	2350 3 1
1908	39·87	5½	10½	369 1 1	2170 14 6

No. 4.

# Statement of Stock and Loans relating to Lands and Buildings in connection with the Sanitary Hospital, 31st March, 1908.

Amount originally sanctioned.	Amount originally borrowed.		Amount unredeemed at commencement of the year.	Amount redeemed during the year.	Amount outstanding at the end of the year.	Amount in Redemption Fund.	Net Debt.	To whom owing.
	Stock.	Loans.						
£ s. d. 1400 0 0	£ s. d. 1395 6 8	£ s. d. 160 0 0	£ s. d. 897 1 10	£ s. d. 2 6 0	£ s. d. 897 1 10	£ s. d. 127 7 1	£ s. d. 769 14 9	Stockholders.
2717 8 0	2708 12 7		1706 17 5		1706 17 5	240 3 1	1466 14 4	"
610 13 8	608 9 0		345 14 5		345 14 5	55 5 2	290 9 3	"
1100 11 0	1097 0 1		722 14 5		722 14 5	99 5 4	623 9 1	"
4116 0 0	4004 9 9		2808 9 1		2808 9 1	306 4 0	2502 5 1	"
624 0 0	607 2 7		462 0 5		462 0 5	66 0 2	396 0 3	"
160 0 0		160 0 0	128 14 3	2 6 0	126 8 3		126 8 3	Ancient Order of Foresters' Society. National Provincial Bank of England.
3800 0 0		3800 0 0	3406 18 0	131 0 8	3275 17 4		3275 17 4	
475 0 0		475 0 0	442 5 0	16 7 6	425 17 6		425 17 6	
15003 12 8	10421 0 8	4435 0 0	10920 14 10	149 14 2	10771 0 8	894 4 10	9876 15 10	
	£14856 0 8							



## CREMATORIUM.

In December last the Crematorium Committee reported to the Council adversely on the establishment of such a method for the disposal of the dead. Your Authority seems to have been influenced by a report from the Borough Surveyor of Manchester, and they recommended the Council not to establish this method in the County Borough.

This, in my judgment, is not in accordance with the highest sanitary opinion. It is certain that this method is slowly gaining ground in the United Kingdom, and in the most up-to-date sanitary districts. I still live in the hope that before many years are past the Council will see the desirability of establishing such a method in this Borough and not to continue to rest content by fouling the earth by the slow process of dessication and resolution by the bodies as at present. However suitable the dry and gravelly nature of our soil may be, there are some dangers to the living by such a continuance, and the space or ground now available in the two cemeteries may, in a few years time, become too limited.

## WATER SUPPLY.

I append herewith a report of an analysis of our Public Water Supply. Both on analysis and bacteriologically it indicates that the water is a good potable water and well suited to a town supply. The experienced and skilful management of so important a town's necessity is well looked after by the able officials who represent the Gas and Water Company, and any suggestion which we, as an Authority, may make to them, is immediately attended to. We keep a very close and continuous supervision on this commodity, and usually monthly analyses are taken.

## LISTER INSTITUTE OF PREVENTIVE MEDICINE.

December 2nd, 1908.

Report on Examination of a sample of water received from Bournemouth on November 3rd, 1908.

The sample was marked "Hydrant, Richmond Hill, Bourne-mouth, 12 noon, 24/11/08.

#### GENERAL CHARACTERISTICS.

The sample was clear and free from smell.

#### ANALYTICAL DATA.

Chemical.	Parts per 100,000	Chemical.	Parts per 100,000
Suspended Matter	...	Nitrogen as Nitrites	None
Dissolved Solids	25.4	Nitrogen as Nitrates	0.07
Chlorine	2.45	Oxygen absorbed from	
Alkalinity	14.0	Permanganate at 80° F. :—	
Permanent Hardness	4.95	(a) 15 minutes	...
Free & Saline Ammonia	none	(b) 4 hours	0.02
Albumenoid Ammonia	0.0038	Lead	None
		Total Hardness 11.0=9.1 grains	
		per gall.	

#### BACTERIOLOGICAL.

No. of micro-organisms in 1 c.c. growing at 22° c. equals 344.

do. do. 37° c. „ 26.

The Bacillus Coli was not isolated from 250 c.c. of the sample, nor from any of the smaller quantities examined.

Remarks:—The sample was quite satisfactory both from the chemical and the bacteriological points of view.

(Signed) GEORGE F. PETRIE.  
ARTHUR HARDEN.

### FACTORIES AND WORKSHOPS ACT, 1901.

The following is a report on the working of the above Act. For further details see the Sanitary Inspector's Report which is herewith appended.

#### Factories, Workshops, Laundries, Workplaces and Homework.

##### 1—INSPECTION OF FACTORIES, WORKSHOPS AND WORKPLACES.

Including Inspections made by Sanitary Inspectors or  
Inspectors of Nuisances.

Premises.	Inspections.	Number of written Notices.	Prosecu- tions.
Factories (including Factory Laundries)	113	3	—
Workshops (including Workshop Laundries)	2068	158	—
Workplaces	49	2	—
Total	2230	163	—

## 2—DEFECTS FOUND

## IN FACTORIES, WORKSHOPS AND WORKPLACES.

Particulars.	No. of Defects.			
	Found.	Remedied.	Referred to H.M. Inspector.	No. of Prosecu- tions.
<i>Nuisances under the Public Health Acts:—</i>				
Want of cleanliness ...	76	76	—	—
Want of ventilation ...	4	4	—	—
Overcrowding ...	8	8	—	—
Want of drainage of floors ...	10	10	—	—
Other nuisances ...	3	3	—	—
Sanitary accommodation :				
Insufficient ...	2	2	—	—
Unsuitable or defective .	13	13	—	—
Not separate for sexes ...	2	2	—	—
<i>Offences under the Factory and Work- shop Act:—</i>				
Illegal occupation of under- ground bakehouse (s. 101)	1	1	—	—
Breach of special sanitary re- quirements for bakehouses (ss. 97 to 100) ...	54	54	—	—
	—	—	—	—
	173	173	—	—

## 3—HOMEWORK

	Number of	
	Lists.	Outworkers.
<i>List of Outworkers (s. 107):—</i>		
Lists received twice in the year ...	64	303
Lists received once in the year ...	5	5
Addresses of Outworkers—		
Received from other Councils ...	4	—
Forwarded to other Councils ...	24	—
Notices served on occupiers as to keep- ing or sending lists ...	10	—
Inspection of Outworkers' premises ...	284	—
<i>Outwork in unwholesome premises (s. 168):—</i>		
Instances ...	13	—
Notices served ...	13	—
<i>Outwork in infected premises (s. 109, 110):—</i>		
Instances ...	2	—

## 4—REGISTERED WORKSHOPS

Workshops on the Register (s. 131) at the end of the year.				Number.
Bakehouses ...	...	...	...	76
Dressmakers and Milliners ...	...	...	...	147
Tailors ...	...	...	...	71

Bootmakers, &c.	...	...	...	70
Laundries	...	...	...	84
Builders and Carpenters	...	...	...	47
Metal Workers	...	...	...	35
Cycle Builders, &c.	...	...	...	21
Cabinet Makers and Upholsterers	...	...	...	34
Coachbuilders	...	...	...	16
Kitchens of Restaurants, &c.	...	...	...	33
Watchmakers, &c.	...	...	...	10
Miscellaneous	...	...	...	64
				711

## 5—OTHER MATTERS

Class	Number
<i>Matters notified to H.M. Inspector of Factories:—</i>	
Failure to affix Abstract of the Factory and Workshop Act (s. 133) ...	49
Action taken in matters referred by H.M. Inspector as remediable under the Public Health Act, but not under the Factory and Workshop Act (s. 5)—	
Notified by H.M. Inspector ...	24
Reports (of action taken) sent to H.M. Inspector ...	24
Other Notices to H.M. Inspector <i>re</i> fixing of Machinery in premises... ..	2
<i>Underground Bakehouses (s. 101):</i>	
Certificates granted during the year ...	2
In use at the end of the year... ..	7

## FOOD SUPPLIES.

The work of regularly and frequently inspecting the food supplies of the Borough, taking samples under the Sale of Food and Drugs Acts and supervising the Dairies, Cowsheds and Milkshops in the Borough is in the hands of Mr. Christie.

## UN SOUND FOOD.

During the year the Inspector has, on 59 occasions, had to exercise his authority in regard to unsound articles of food deposited or intended for sale, and in every instance the unsound articles have been destroyed.

In all, 3,987lbs. of unsound food have been destroyed, made up as follows :—

1,310lbs. meat.

95lbs. fowls.

114lbs. fish.

2,468lbs. fruits and vegetables, of which 66lbs. were tinned goods.

### FOOD AND DRUGS ACTS.

Under these Acts 300 official and 100 unofficial samples were procured and forwarded to the Public Analyst for analysis. Your Inspector also procured and submitted to the “Gerber” test for milk fat 101 samples of “farmers” milk as delivered to milk vendors in town. The results of analysis will be found in the reports of the Analyst and Inspector herewith appended.

### BACTERIOLOGICAL EXAMINATION OF MILK.

Fifty-six samples of milk were procured by the Inspector as the milk was delivered by farmers to retailers in the Borough. These samples were submitted to the Borough Bacteriologist (Mr. Tanner) for microscopic examination with the specific view of detecting disease organisms.

Once more I am pleased to report that in no sample was the *Bacillus Tuberculosis* found, and I think the fact that during the past eight years—the period during which such samples have been taken and examined—not one sample examined has been found to contain the tubercle bacilli, points decisively to the healthy condition of the cows in the dairy herds from which the Borough’s supply of milk comes.

This healthy condition is no doubt due mainly to the open air existence which practically every cow enjoys in both Hampshire and Dorset; no dairy farmer ever thinking of keeping his cows housed up in the sheds during the day-time unless during severe and stormy weather.

The Borough Bacteriologist, however, detected in



five samples the products of udder inflammation; products which when present in milk, make your officials treat such supply with suspicion and use every endeavour by inspections at the farm and by other means, to remove every cause of suspicion.

The 56 samples of milk were also examined for excess of cellular elements, Bacteria or presence of foreign matter. Mr. Tanner has written fully on the results he has obtained from his examinations, both in regard to milk and ice cream, and I fully concur with the remarks made by him in his report. The action taken against the senders of unsatisfactory samples of milk has been as follows: In seven of the worst cases your Inspector has visited the farmer, inspected the cowsheds, etc., and has pointed out what, in his opinion, was the cause of the complaint. In 13 instances strong letters have been written to the consignors by either the Town Clerk or myself, while your Inspector has had "repeat" samples taken and examined, to find out what improvement, if any, had been made, and to find whether the action taken has had the desired effect of having the milk sent into the Borough in a cleaner and healthier condition.

### ICE CREAMS.

In six instances letters of warning were sent by the Town Clerk to the vendors of the ices, while in the other cases special inspections were made by your Inspector and verbal warning given.

### DAIRIES, COWSHEDS AND MILK SHOPS ORDERS.

The number of premises now registered under the above orders is 209, viz., cowsheds 8, dairies 37, milk shops 39, purveyors 125.

All the cowsheds and dairies in the Borough have been frequently inspected and the regulations relating to cleanliness, limewashing, and general sanitation strictly enforced.



In several dairies extensive improvements have been carried out and in several places entirely new premises have been erected. The half-yearly linewashing of premises has in every instance been carried out after verbal notice given by your Inspector.

The sanitary condition of the dairies and cowsheds in the Borough has on the whole been well maintained during 1908. Although many improvements have been carried out and the sanitary conditions of the majority of the dairy premises have been bettered, there still remain in the Borough several small premises which are much in need of alteration and improvement. It is, however, hoped the needed alterations will be made soon without the necessity of formal action.

The following is a short list of the works carried out during 1908 at the dairies and cowsheds in the Borough:—

Entirely new dairy premises provided	....	....	6
New milk stores provided or improved	....	....	10
New wash-up houses provided	....	....	5
New or improved drainage provided	....	....	7
Defective floors repaired and made impervious	....	....	5
Yards paved or made good with impervious material			9
Alterations and repairs to premises <i>re</i> sanitary conditions			7
Nuisances abated	....	....	4
Premises closed as dairies or milkshops	....	....	3
Action <i>re</i> possible contamination of milk	....	....	2

### SLAUGHTER-HOUSES.

The one licensed and eight registered slaughter-houses in the Borough have been kept in a satisfactory condition. Regular inspections have been made; the regulations as to periodical limewashing enforced, and the general sanitary condition of the premises maintained.

Only in five instances was it found necessary for your Inspector to take action for the abatement of nuisances.

### FRIED FISH SHOPS.

There are now 12 of these shops in the Borough,

and, from time to time, inspections have been made. Nuisances in these places are rare, but your Inspector still keeps a keen eye upon the quality of the fish sold at such shops, as well as on the conditions under which they are prepared, cooked and sold.

### WINTON & MOORDOWN DISTRICT.

Steady progress has been made with the re-draining of houses in this district during the past year.

1,581 old houses have been drained to the new sewers in the district since the main outfall was constructed in 1904. There are still a few new roads yet to be sewered and made up under the Private Streets Works Act, 1892, and already notices have been served on the owners accordingly.

1,384 cesspools have been abolished and filled in.

### SEWER WORKS & STREET IMPROVEMENTS.

The following is a list of the roads that have been sewered during the past year :—

#### UNDER THE PRIVATE STREETS WORKS ACT, 1892.

Pine Road (2nd portion)  
Oxford Avenue (portion)  
Green Road (portion)

#### SEWERS CONSTRUCTED BY PRIVATE OWNERS.

Oban Road  
Stirling Road  
Roslin Road (continuation)  
Charminster Avenue  
Road No. 5, Charminster Avenue Estate  
Do. 4, ditto  
Road West Cliff  
Portchester Road (extension)  
Summerley Road

#### SEWERS ALSO CONSTRUCTED IN—

Queen's Park South Drive (extension)

Heron Court Road, between Alma Road and  
Fitzharris Avenue  
Heron Court Road, between Hankinson Road  
and Maxwell Road  
Linwood Road (extension)  
Holdenhurst Road (extension) to drain new  
Library  
Westover Road  
Cavendish Road (extension)  
Relaying sewer under Messrs. J. J. Allen's  
premises  
Relaying sewer under Fancy Fair, Old Christ-  
church Road

#### PUBLIC ELEMENTARY SCHOOLS.

In a report to your Council at the end of the year 1907, I alluded to the new Education Extension Act, and thereon recommended that a special School Medical Officer should be appointed, to undertake these new sanitary duties.

The large number of schools and the number of children in attendance who had to be dealt with (being upwards of 9,000) to do this work thoroughly was somewhat too onerous and extensive for your present Medical Officer of Health. Your Council coincided with these views and appointed Dr. A. D. Edwards to undertake this work in the County Borough. He commenced his duties in September, 1908, and is now in full swing with this work. He is a gentleman who had previously held an appointment in one of the large Boroughs where he had gained considerable experience in this special work. I am pleased to bear my testimony to the thoroughness and enthusiasm with which he has thrown himself into these duties, and as a result much sanitary benefit will be gained, more particularly in the unnecessary extension of those milder infectious and preventable disorders that cause absence from school. He is brought into contact with a large class of persons who have as yet much to learn on hygienic matters but, as a whole, are by no means

ignorant of the importance that high class sanitary conditions are of the utmost importance to the well being of the Borough of Bournemouth.

I am pleased to state that the School Medical Officer and the Sanitary Authorities are working amicably, and I see no reason to suppose but that great public good must result from this Act.

### DISPOSAL OF ASH REFUSE.

The proper disposal of town ash and house refuse continues to press with an ever insistent force. The continued and rapid growth of the Borough in every direction, the increase in houses of a large rateable value have clearly demonstrated that the present refuse destructor is totally inadequate. There is a demand for at least two more properly constructed and up-to-date destructors for properly dealing with this refuse, one to be placed in the west district and one in the east. That there would be an objection to the erection of such a depot goes without saying; people generally view this suggestion through the prejudice of their own selfish and private aspirations. But your Council must grasp the nettle boldly and be intent on the real interests of the Borough as a whole, some such means must be provided and that soon or otherwise the reputation of the town will be menaced.

During the past year a number of residents in one portion of the Borough made a complaint to the Local Government Board, there was some cause for their complaint, and it was only by the continuous vigilance and care of those in the Surveyor's Department that no further action was taken by the Local Government Board.

During the year I have continued to make full reports at the usual monthly meetings of the Sanitary Committee, on the sanitary conditions of the town, dealing fully with the comparative death rates in the United Kingdom. This work entails a great amount of labour and at times presses rather unduly.

The average death rate for the past ten years for



residents is only 9·83 per 1,000, and the average death rate for the past ten years, inclusive of visitors and residents, is 12·31 per 1,000.

The average zymotic death rate for the past five years, 0·27 ; contrast this also with the table in the foregoing report of the Registrar General, and from that conclusive testimony for the year 1908, it will be admitted by all that we have much to be thankful for.

Zymotic Death Rate.		
England and Wales	....	1·29
76 great Towns ....	...	1·59
142 smaller Towns	....	1·26
England and Wales less the		
218 Towns ....	....	0·99
Bournemouth ....	....	0·27

From these evidences your Authority will agree with me in thinking that the County Borough still maintains its prominent position in the United Kingdom.

I remain, gentlemen,

Your obedient servant,

PHILIP W. G. NUNN,

Medical Officer of Health.





COUNTY BOROUGH OF BOURNEMOUTH

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ANNUAL REPORT  
OF THE  
BOROUGH BACTERIOLOGIST

*For the year ending 31st December, 1908.*

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TO THE MAYOR AND TOWN COUNCIL,  
BOURNEMOUTH.

GENTLEMEN,—

I herewith beg to submit to you my Annual Report concerning the duties entrusted to me as Bacteriologist for the County Borough of Bournemouth.

During the past twelve months, I have made 446 bacteriological investigations, which is an increase of 40 as compared with the previous year.

The examinations in question consisted of :—

- 311 throat swabs *re* Diphtheria, &c.
- 56 milk samples *re* Tuberculosis.
- 56 ditto *re* Pus, Blood, Dirt, &c.
- 8 specimens of Blood *re* Typhoid Fever.
- 1 examination of excretions *re* Typhoid Fever.
- 14 samples of Ice Creams *re* Bacterial Impurities

The following table shows how the examinations were distributed throughout the year :—

In January	....	23	examinations were made.	
February	....	27	„	„
March	....	21	„	„
April	....	25	„	„
May	....	31	„	„
June	....	27	„	„
July	....	30	„	„
August	....	22	„	„
September		44	„	„
October	....	32	„	„
November		69	„	„
December		95	„	„
Total		446		

The above shows considerable variation as regards the bacteriological requirements at different periods. From January to August the number of examinations was below the average. In September there was a substantial rise, followed by a partial fall in October. In November another quick rise occurred; this increased still more throughout December, when a record was reached, i.e., 95 examinations were carried out in one month.

The amount of extra work involved at this period was of course very heavy, but the emergencies were methodically dealt with, and no hitch or delay occurred concerning the quick reports required, or the administrative details generally.

As regards my work for the Sanitary Hospital, I have in previous reports given a table showing how many times it has been necessary to bacteriologically test each patient's throat before he or she could be declared free from the germs of infection. The following list gives the same information for 1908:—

48	patients	required	1	examination.
45	„	„	2	„
29	„	„	3	„
12	„	„	4	„
5	„	„	5	„

1 patient required 6 examinations.

1       "               "               7               "

As regards the 48 patients who appear to have had only one examination each, it should be mentioned that practically every patient has at least two examinations. But as the above record is strictly confined to the year 1908, it does not fully account for the examinations made for patients admitted in 1907 and discharged in 1908, or those admitted in 1908 and discharged in 1909.

### MILK.

During the past year 56 samples of milk have been submitted to examination for Tuberculosis, and a similar number of samples examined for pus, blood, and other undesirable constituents.

No tubercle bacilli were found in any of the samples. This is in accordance with previous experience. I have never yet found tubercle bacilli in the public milk supply of Bournemouth.

Considering the very vexed question of cleanliness and objectionable constituents, I can report a certain amount of improvement, but progress is very slow, relapses are frequent, and there remains much to be done before the ideal is attained. Of the samples examined, 20 were satisfactory, 18 were slightly tainted, 18 were decidedly dirty and 5 contained pus.

The commonest cause for complaint is the almost constant presence of cow-manure; it is quite an exception to receive a milk entirely free from this objectionable form of contamination. This statement may be indignantly denied by some interested parties, but if challenged I am quite prepared to give practical proof to the unbeliever.

The milk of Bournemouth is infinitely better than that supplied to many other towns, but that is not saying much. It is common knowledge amongst those who are in a position to know, that the want of cleanliness concerning milk is lamentable throughout the country. Whether due to ignorance or indifference, the fact

remains that dirty milk is exceedingly prevalent, and perfectly clean milk is not easily obtained.

At the present moment there are no effectual measures to enforce a supply of clean, unpolluted milk, but it is hoped that the proposed legislation will bring about some changes for the better.

Personally, I feel convinced that the complex problem of a clean milk supply will never be satisfactorily solved until the dairy farmers are rendered liable to exemplary punishment for supplying the retailer with milk contaminated with filth. It is during the process of milking, and at the dairy farms that the first and main pollution occurs. Until that is overcome, all other measures for reform will be futile.

The idea of drinking milk plus filth is not pleasant to contemplate, but there is a much more serious side to this matter than mere sentimentality. Tens of thousands of young children are reared upon cow's milk, their lives depend upon it, and the same may be said of innumerable invalids. For these children and invalids pure milk is most desirable, owing to its high food value. On the other hand, dirty milk possesses the following drawbacks (1) its keeping properties are reduced to nil, (2) its composition becomes profoundly altered, (3) its food value is greatly diminished, and (4) its influence in exciting digestive ailments is beyond dispute.

### TYPHOID FEVER.

For the whole year only eight examinations for typhoid fever were required. This is a very small number in proportion to the population of this County Borough. I have previously drawn attention to the fact that, considering the constant influx of visitors to Bournemouth, it would not be surprising if the number of cases of imported typhoid considerably exceeded the modest figure quoted above.

### ICE CREAMS.

Evidence resulting from the examination of ice



creams, reveals the continued prevalence of gross bacterial pollution. Of the 14 samples examined, five were fairly satisfactory, seven were bad, and two were very bad.

Few articles used as food can compare with ices in the way of containing so many millions of bacteria. In the majority of cases the organisms present are of a kind which induce rapid putrefaction, thus rendering the material (ice creams) unfit for food. It is reasonable to assume that a certain number of gastric and gastrointestinal disorders are due to eating putrescent ices, but when people are attacked with the disorders mentioned, it is much more likely the cause will be sought in the direction of tinned food and ptomaine poisoning, while ices remain unsuspected.

A point of some interest is that the ices of better class manufacturers are frequently polluted more excessively than the cheaper varieties. I was at a loss to account for this for some time, but eventually the mystery was solved. Through the courtesy of the vendors, I was able to witness the process of manufacture, step by step, and by testing at the various stages, I was able to discover where the contamination occurred. Briefly, it was due to the addition of whipped raw cream to the general mixture just before the final (freezing) process. The cream is bought in bulk, it is used for sundry purposes, and may be kept for several days before the whole of it is used. When quite fresh, cream contains a good many bacteria and is an excellent medium for their growth; stale cream swarms with uncountable millions of bacteria. From this it is easy to understand what happens when a certain amount of raw cream (say two days old) is stirred into a mixture intended for ice cream. The "mixture," previous to the addition of cream, is of the nature of custard, and has been heated nearly to boiling point, which kills most bacteria; but the addition of the whipped cream introduces myriads of living bacteria, and the ices are thus fouled in proportion to the staleness of the raw cream.

Since my last report, several matters bearing upon bacteriology and public health have commanded atten-



tion. The question of flies as active agents in spreading disease, has been further investigated, and the knowledge gained has fully justified previous accusations made against the house-fly in particular.

In the case of my own limited experiments, the results amounted to almost certain proof that the flies, so often found in diphtheria wards, frequently travel on to scarlet fever wards, where occasionally they are the means of infecting scarlet fever patients with diphtheria. But other and more able authorities have scientifically studied the life history and pernicious habits of the fly, and the only conclusion to be arrived at is that in the house-fly we have a real danger, both as regards communicating disease and contaminating food.

In conclusion, I would refer to a subject which has recently been exercising the minds of medical men very considerably, and causing anxiety to not a few. I allude to the subject of "carriers." A "carrier" may be defined as an individual who, without showing any manifestation of disease, carries or harbours infectious germs which are capable of infecting other individuals. Most of the recorded cases are concerning either typhoid fever or diphtheria. In both instances it has been proved beyond doubt that individuals have carried and excreted virulent germs for long periods (extending to years) after recovery from the infectious diseases mentioned. Here is an explanation for many outbreaks, otherwise unaccountable. In my own personal experience I could give several instances where the detection of a "carrier" has been followed by the rapid disappearance of all troubles, which previously recurred with great persistence. This subject is essentially of the highest importance to the welfare of Bournemouth. In this Borough there is an unceasing stream of fresh arrivals in the shape of visitors, new residents, pupils at boarding schools, etc., etc. Under such conditions we must expect to meet with "carriers" from time to time.

There is no necessity for alarm or sensational state-

ments, but the matter is one worthy of deliberation by those responsible for the health of Bournemouth. The ways and means of dealing with the situation are plainly in the direction of preparedness.

I remain, gentlemen,

Your obedient servant,

F. J. TANNER,

Borough Bacteriologist.



COUNTY BOROUGH OF BOURNEMOUTH.

SANITARY DEPARTMENT,

March 12th, 1909.

TO THE MAYOR AND TOWN COUNCIL, COUNTY  
BOROUGH OF BOURNEMOUTH.

GENTLEMEN,—

I have the honour to submit for your consideration the Annual Report upon the works carried out by the Sanitary Inspectors' Department for the year 1908.

I beg to express my indebtedness to the loyal and ready support given at all times of pressure both in season and out of season by the District Sanitary Inspectors, Messrs. Lewis, Phillips, Adams and Carter, the Workshops Inspector, Mr. Smith, and the clerks, Messrs. Haigh and Brazier, and the employees of the Department. It is pleasing and gratifying to be able to testify that the duties of the Department have been carried out through the whole of the year without the least friction, nor has it been necessary to apply for magisterial aid in a single instance, notwithstanding the large amount of structural improvements which have been effected in the drainage and sanitary arrangements of the Borough. Particularly is this a noticeable fact in the case of Winton, which has been practically re-sewered and re-drained during the past four years. The owners of properties have thus supported your Authority's efforts to bring this district up to a standard of good sanitation in a most commendable spirit.

It is to be hoped that similar action and efforts will

be made by the owners in regard to the properties not yet drained into the public sewers and thus maintain this splendid record.

I feel also I ought not to let the opportunity pass without expressing the appreciation and thanks of the Department to the architects, builders and plumbers practicing in the Borough for the ready and willing assistance they have rendered to facilitate the routine work of the Department in the reconstruction and testing of drainage works. I am convinced it is mainly due to the mutual confidence existing that the standard of sanitary work of the Borough has been raised to its present high level and is so well maintained.

### DISPOSAL OF HOUSE REFUSE.

In the Annual Report for 1907 the attention of your Authority was called to the insufficient and unsuitable ashpit or ashbin accommodation in many of the dwellings and business premises which I stated reflected adversely on the sanitary reputation of our Borough. A general improvement is being effected in this respect, but there having been no regular system of enforcing proper provision for some time past it will take many years to make up for the delay and to obtain anything like a general improvement.

As to the destruction of house refuse this is a much more serious problem than many people imagine. The large amount of organic matter now deposited in the ashbin could be very materially reduced if the housewife would insist on such articles as cabbage leaves, potato peelings, fish refuse and vegetable matter being burnt in the kitchen; and there is no reason why it should not be so dealt with. The general reason given is that the smell of burning this refuse causes annoyance in the kitchen and certain parts of the dwelling; but with ordinary care, and burning the small quantities at once instead of allowing it to accumulate, the annoyance mentioned can be obviated, particularly with the modern kitchen. Again, in Bournemouth where such a large



number of the dwelling-houses possess good sized gardens, this kind of refuse ought to be put at the extreme end of the garden for a few days and then buried. Such refuse possesses good manurial value, and this kind of disposal if only on the grounds of economy is possible if preferred to that of cremation. In the more thickly-built and populated parts of the Borough there can be no question that cremation is the better method.

Generally speaking there is a great improvement in the storage of house refuse, and the present-day dustbin is a great advance on the old dusthole, which was a receptacle for all kinds of filth. I feel confident if the house holders would only assist your Authority in getting rid of the organic house refuse referred to, the problem of the disposal of the other kinds of refuse such as ashes, clinker, &c., would be a comparatively simple one, and it would also very materially assist in reducing the cost of disposal, and thus mean a reduction of the charge on the rates.

Your Authority have held many special meetings and paid visits to other towns with the view of ascertaining the best methods of the disposal of the large amount of house refuse now systematically collected throughout the Borough. It is to be hoped that the system of dumping the greater portion of such refuse, even though such tipping places are situated outside the Borough, will be substituted by a more sanitary and up-to-date method of disposal. The question of an additional refuse destructor has been in abeyance for over ten years entirely due to the opposition of burgesses living in the neighbourhood of the respective sites from time to time selected by your Committee. The time has now come however when the question of more efficient disposal cannot be any longer postponed, opposition or no opposition. The sanitary reputation of the Borough absolutely demands the improvement.

#### THE HOUSE-FLY.

During the late autumn of 1907 several complaints

were received from residents that certain portions of the Borough were subject to swarms of house flies, and as the question of the house-fly being a possible active agent in the spread of infectious disease, particularly epidemic diarrhœa, has now been practically and indisputably confirmed by scientists, a full report of the subject was presented to your Authority in June as to certain steps to be taken to prevent a recurrence of such complaints in 1908. After careful consideration your Authority decided that the following efforts should be directed to bring about an improvement in the Districts affected.

(1) That the house refuse tips on the outskirts of the Borough should be more effectually covered over with a greater depth of suitable soil immediately after the deposit of the refuse.

(2) That more frequent inspections should be made during the summer months of the marine stores, slaughterhouses, poultry runs, and those shops which supply perishable provisions such as butchers, fishmongers, greengrocers and bakers.

(3) The District Inspectors to make regular and periodical general inspections of the 709 stables and mews as per the list submitted to your Authority with the view of strictly enforcing the Bye-laws as to the regular removal of stable manure accumulations, and that the following circular letter be sent to all jobmasters and owners of stables:—

BOROUGH OFFICES,  
BOURNEMOUTH,  
June, 1908.

DEAR SIR,

In the interests of the public health of the Borough the Mayor and Town Council, acting as the Sanitary Authority for the County Borough of Bournemouth, request that you will, during the hot months of the year (May to October) cause all

accumulations of stable manure to be removed from your premises at least once a week as required by the Nuisance Bye-laws.

Also that you will arrange for all such receptacles to be thoroughly emptied and cleansed at each removal.

BY ORDER OF THE SANITARY COMMITTEE.

NOTE.—All trade refuse or waste liable to putrefaction, such as fat, bones, garbage, fish offal, &c., should be removed daily from the premises.

The result of these special efforts without doubt effected a great diminution in the number of house flies throughout the Borough during the summer and autumn months, and public attention having been called to this question also influenced many persons to assist privately in reducing the numbers of this household annoyance, or even pest, as no doubt it was in some districts in 1907.

### RATS.

In accordance with your Sanitary Committee's instructions attention has been given during the year to the extermination of rats which had become so numerous as to be a serious annoyance, if not of actual danger to health in certain parts of the Borough. For this purpose one of the Corporation employees, who is an experienced rat-catcher, was told off to do this work, and the methods adopted has been the means of materially reducing the number of rats. On the Corporation properties and open spaces such as the Horse Shoe, the Bourne Stream, the Cliffs and Pleasure Gardens they have been almost exterminated, particularly where the special Virus was used. Many burgesses availed themselves of the opportunity of engaging the rat-catcher at a charge of 6s. per day, with a minimum charge of 3s.

### MARINE STORES.

Special attention has been given to the large marine stores established in the Borough.

Structural alterations have been carried out at the request and under the supervision of the Department to

improve the conditions under which the bones, fat, &c., are temporarily stored on the premises.

These premises are visited regularly once a week, and the owners are willing to do what they can to keep their premises in as clean a condition as possible, and there has been a decided improvement on previous years, particularly during the summer months.

### COMMON LODGING HOUSES.

There are only two registered common lodging houses in the Borough. Extensive structural improvements have been made in one of these. The premises in both instances have been kept in clean and satisfactory condition. The general supervision of the premises is under the control of the police.

### INTERCEPTING TRAPS AND HOUSE DRAINS.

The Borough Engineer and myself having been requested to give evidence before the Departmental Committee appointed by the President of the Local Government Board to enquire and report as to the use or otherwise, of the intercepting trap in house drainage, a house to house inspection was made of 1,058 dwelling-houses by the District Sanitary Inspectors in December last. The facts as per table following were ascertained, which go to prove that there are no serious objections to the trap in causing unknown stoppages, such as has been stated to be the principal objection by the opponents of the intercepting trap.

The result also testifies after comparing the returns with some other towns that the construction of drainage, and the form, and method of fixing the intercepting trap in this Borough, are most satisfactory judging from the small percentage of defects ascertained in making such a "surprise" general inspection.

During the period the inspection was being made, viz., about three weeks, the rainfall was  $\cdot 6$  of an inch, the water carriage for the sewage in the drains was therefore only the usual waste water from the dwellings.

The Departmental Committee have intimated that they will shortly publish the result of their deliberations. The



appointment of this Committee has aroused considerable interest in the Sanitary world and their report is most keenly awaited by the Medical Engineering and Architectural Professions, all of which were represented on the Committee. The question is one of supreme importance and having been a source of controversy among sanitarians for many years it is to be hoped in the interests of property owners and inhabitant householders as well as the Sanitary Authority, that the Committee will now be able to definitely and satisfactorily settle the question.

### PARTICULARS OF HOUSE TO HOUSE INSPECTION.

(1) The number of traps examined 1058

(2) The number of cases in which :—

(a) The intercepting trap is blocked	...	...	4 (completely blocked).	Percentage of totally blocked drains, .3.
			13 (partially blocked).	Percentage of partially blocked interceptors, 1.2.

(b) An accumulation of sewage is in the chamber ... 4

(c) Though no accumulation at present exists, appearance of the chamber shows that there has been accumulation	8	Percentage showing signs of previous stoppings, .7.
--	---	---

(d) The "cap" of the raking or cleaning arm is displaced	5	Percentage of old raking arm interceptors with Caps out, .4.
--	---	--

(e) Exact cause of obstruction if possible :—

Totally blocked chambers and drains were caused in—  
2 instances by sticks in Interceptor.

1 „ „ 7ft. of  $\frac{3}{4}$ in. galvanised iron pipe.

1 „ „ grease in interceptor. (Large Nursing Home Establishment).

Partially blocked interceptors were caused in :—

3 instances by the insufficient "fall" to main drain.

5 „ „ the "cap" for raking arm. Obsolete form of trap in each case, not now used.

4 „ due to insufficient supply of water. The obstructions were cleared by the ordinary flush from the water taps over sinks.

1 „ of imperfect interceptor, an obsolete form of trap.



## FACTORY AND WORKSHOP ACT, 1901-1907.

The total number of workshops and workplaces now registered in the borough is 711, an increase of 75 on last year.

During the year 138 new workshops have been registered, 183 workrooms have been measured, and cards *re* cubic space, &c., have been supplied to the occupiers.

The whole of the premises registered have been inspected during the year; the inspections have been made systematically and as occasion has required, with the view of detecting any nuisance arising from overcrowding, insufficient ventilation, defective sanitation, uncleanness, and generally to enforce the special requirements of the Acts.

In all premises where nuisances have been found to exist, notice has been given to the owner or occupier, calling upon them to remedy the defect, and it is very satisfactory to be able to report that in no instance has it been necessary to take legal proceedings.

During the year, 2230 inspections have been made, and 163 written notices have been served.

A special Report was prepared for the Sanitary Committee on the question of fire escapes for workrooms situate on or above the first floor, and instructions have been given to prepare By-laws relating to such premises under Sec. 15, F. & W. Act, 1901-1907.

Two premises have been re-arranged to allow of sufficient fire escape, where more than 40 hands are employed. The alterations made have been approved of by Captain Lane of the Fire Brigade.

The following is the list of workshops on the register at the end of the year, classified according to trade and shewing the number of rooms occupied: --

Trade.	Premises Registered.	Number of Rooms Occupied.
Bakehouses ....	.... 76	80
Dressmakers and Milliners ....	.... 147	233

Tailors	....	....	74	104
Bootmakers and Saddlers	....	....	70	72
Laundries	....	....	84	191
Carpenters and Builders	....	....	47	65
Cabinetmakers and Upholsterers			34	43
Coachbuilders	....	....	16	35
Watchmakers, &c.	....	....	10	16
Kitchens of Restaurants, &c.	....	....	33	33
Metal Workers	....	....	35	36
Cyclebuilders, &c.	....	....	21	25
Miscellaneous	....	....	64	74
			<hr/>	<hr/>
Total	....		711	1007
			<hr/>	<hr/>

### BAKEHOUSES.

There are now 76 bakehouses occupied in the borough, seven of these being underground and the remainder being on or above the ground level.

The seven underground bakehouses are certified by your Authority to be suitable, as regards light, ventilation, construction, &c., to be used as bakehouses.

The whole of the bakehouses have been cleansed and limewashed twice during the year in accordance with the requirements of the Act.

In three bakehouses, extensive structural alterations were made and the work was supervised by this Department.

Two bakehouses have been closed during the year.

### KITCHENS OF RESTAURANTS, &c.

These premises have been regularly inspected during the year, and in two instances it was found necessary to serve notices requiring the abatement of nuisances.

In making these inspections special attention has been given to the cleanliness of larders, tables, and cooking utensils, and these have been found to be very satisfactory.

## LAUNDRIES.

Under the Factory and Workshop Act, 1901, laundries could not be dealt with unless more than two outsiders were employed, and in many cases the occupiers of small laundries kept the number of employees under three for the purpose of evading the Act; oftentimes working long hours in order to do so.

By the passing of the Factory and Workshop Act, 1907, this distinction has been removed, and the Act has been extended to all laundries carried on by the way of trade or for the purposes of gain, also to laundries carried on in connection with certain Institutions.

In anticipation of the passing of this Act, a list of all small laundries coming under the notice of this Department had been kept. A copy of this list was forwarded to H.M. Inspector of Factories for the district.

Early in the year these laundries were visited and, where necessary, the owners or occupiers were required to carry out the necessary works in order to make the premises comply with the special provisions of the Act as to light, ventilation, drainage of floors, &c.

In no case was it necessary for legal proceedings to be taken.

## HOMEWORK.

During the year 69 lists containing the addresses of 308 outworkers have been received. Twenty-four of these addresses were outside of the Borough, and the usual particulars were forwarded to the Authorities of the district in which the work was done.

Four addresses were received from outside Authorities.

284 Visits were made to outworkers' premises, and in 13 instances it was found necessary to serve notices for the cleansing of the premises in which work was done. Four notices were served requiring abatement of nuisances arising from defective water closets.

Two cases of infectious disease occurred in outworkers' premises—an outworker himself and his son.

As both cases were removed to the Sanitary Hospital it was not necessary to make an order to prohibit the giving out of work to be done on the premises.

Ten employers of outworkers were found who failed to keep the "Register of Outworkers," or neglected to send in a copy at the specified time; in each case a letter of warning was sent, and the requirements were subsequently complied with.

## SHOP HOURS ACTS, 1892-1895, AND SEATS FOR SHOP ASSISTANTS' ACT.

**SHOP HOURS ACT.**—The object of this Act is to prevent the employment of "young persons" (under the age of 18 years) for a longer period than 74 hours, including meal hours, in one week.

During the year 139 visits have been made to shops in the Borough under this Act, and it is satisfactory to note that in no case has a young person been found to be employed more than 74 hours in a week.

In 27 instances young persons were found to be employed in shops in which the notice, as required by Section 4 of the Act, was not exhibited. Notices were delivered to each of these premises, and in two instances letters of warning were sent.

When making inspections under this Act enquiries are also made as to the employment of children and the provision of seats for the female assistants.

**SEATS FOR SHOP ASSISTANTS' ACT.**—Eleven special visits were made to shops in which female shop assistants were employed; one shop was found without a sufficient number of seats.

A letter of warning was sent, and the employer was requested to provide the proper number of seats.

This request was subsequently complied with.



## EMPLOYMENT OF CHILDREN ACT.

On 51 occasions inspections have been made of the Borough after 9 p.m. for the purpose of detecting any offence against the provisions of this Act.

Sixteen children were found employed in contravention of the Act.

In each case a letter of warning was sent either to the parent or employer of the child; in no case was it considered necessary to take legal proceedings.

Special visits have been made to hairdressers' establishments after 9 p.m., and in two instances children were found employed after the legal time; each case was reported to your Authority and the Town Clerk was instructed to send letters of warning to the employers. Subsequent visits showed that the warning had the desired effect.

During the year five copies of licenses granted, under the Prevention of Cruelty to Children Act, 1904, for children to take part in public entertainments, have been received, and on each occasion the place of entertainment was visited and the conditions of the license enforced.

The duties relating to Employment of Children are at present carried out as prescribed by the Sections of the General Act. These are not sufficiently far-reaching to meet the requirements of the duties. There are a large number of children employed in the Borough who are still attending School, and the number of hours some of them are at work, both before and after school hours, are too long.

I am of opinion it is important that your Authority should, at an early date, consider the advisability of framing By-laws and Regulations under Sec. 1 of the above Act, with the view of more efficiently controlling the hours of labour, particularly with reference to Newsboys, Errand boys, and Street Trading on Sundays.

Such By-laws may at first sight appear to effect a hardship in certain cases, "but there are many School children at present employed under such conditions"



that they cannot possibly be in a fit physical condition to give proper and intelligent attention to their school lessons.

Additional responsibility will also devolve upon your Authority by the passing of the Children's Bill which comes into force on April 1st, 1909, and the duties in connection with this work will then no doubt require complete re-organization.

### MIDWIVES' ACT, 1902.

The object of this Act is to secure the better training of midwives and to regulate their practice.

Twenty-one midwives gave notice to your Authority of their intention to practice in the Borough during the year.

Of these, nine are trained midwives and the remainder are certified on the ground of having been in *bona-fide* practice twelve months prior to the passing of the Act.

For the purpose of enquiring into the mode of practice of the midwives and to examine their books, appliances, &c., 71 visits were made.

Nine of the midwives were found not to be complying with the rules of the Central Midwives Board; these were reported to your Authority, and it was resolved that a letter of warning should be sent to each. This was done, and on subsequent inspections being made it was found that the warning had the desired effect.

The following is a list of the notices received from midwives during the year :—

Notifications of practice	.... 21
„ of stillbirths	.... 4
Copies of Medical Help Records....	13

One notice of death and five notices *re* change of address of midwives have been sent to the Central Midwives Board.

The following table shows the relative numbers of

trained and untrained midwives who, since the passing of the Act, have given notice of their intention to practice in this Borough.

It will be seen that the number of trained midwives is steadily increasing—

Year.	No. of midwives who sent in noti- fication of practice.		Number trained.		Number untrained.
1904	11	....	1	....	10
1905	19	....	3	....	16
1906	18	....	5	....	13
1907	20	....	8	....	12
1908	21	....	9	....	12

Up to the present no difficulty as to the collection of doctors' fees, in cases where medical help has been sent for under the rules of the Central Midwives Board, has been brought to the notice of this Department.

On enquiries I find the general fees charged by the midwives varies as much as from 10s. per case to 30s. In fact, in some of the poorer cases they are unable to get any settled fee, and get what they can.

The number of births in the Borough last year was 1120, of these 465 were attended by the registered midwives.

In 356 cases the midwife attended alone or with another woman, and in 109 instances the midwife attended with a doctor.

Taking the 21 midwives on the register, this would give an average number of cases per midwife without a doctor of 16·9, and of cases attended with a doctor of 5·1.

#### WATER METERS.

The following is a comparative statement of the consumption of water supplied by the Gas and Water Company to your Authority for the years 1903, 1904, 1905, 1906, 1907 and 1908 :

Situation of Meter.	Consump- tion in 1903.	Consump- tion in 1901.	Consump- tion in 1905.	Consump- tion in 1906.	Consump- tion in 1907.	Consump- tion in 1908.
Cabstand, Littledown Road	22,500	14,400	9,800	7,300	5,300	6,600
.. St. Swithun's Road	18,200	13,900	14,300	10,400	9,700	8,700
.. Waverley Road..	23,200	16,000	5,200	5,800	6,300	5,400
Fire Station, Holdenhurst Rd.	95,100	107,800	95,600	100,700	71,000	75,000
Cabstand, Meyrick Road ..	22,200	28,100	9,800	13,500	13,000	14,700
.. Madeira Road ..	34,900	27,800	16,600	17,600	17,700	21,500
Borough Offices ..	207,000	191,400	215,500	243,000	185,500	196,000
Yelverton Chambers ..	24,100	22,500	31,000	32,400	26,100	23,500
West Gardens Tennis ..	1,000	1,400	1,400	2,000	4,200	6,000
Corporation West Yard ..	104,500	119,500	129,400	107,500	119,900	81,800
Wharf Road Depot ..	64,600	48,100	48,400	64,900	63,600	49,900
Drinking Trough, Chine Rd.	25,000	44,800	69,000	84,200	92,000	98,600
Cabstand, Durey Road ..	20,600	19,800	14,800	9,100	4,200	5,600
.. West Cliff Road	66,900	17,100	15,000	12,700	15,200	17,300
.. No. 1, West Cliff	24,300	19,300	12,800	11,900	11,500	16,600
Cabstand, Exeter Road ..	8,400	1,500	3,500	4,800	3,400	3,700
West Fire Station ..	30,000	40,400	49,700	55,100	71,300	42,600
Mess Room, Westover Gardens	28,000	3,200	3,900	3,800	3,400	3,600
Engine House in Gardens ..	690,900	731,500	896,900	732,100	612,400	493,100
Lansdowne Drinking Trough	24,900	31,800	27,300	32,200	41,100	52,800
Cabstand, Charnminster Road	5,500	10,300	6,100	8,300	9,900	5,600
Cemetery, Wimborne Road	86,200	90,100	108,100	127,200	93,600	125,800
The Refuse Destructor ..	48,900	14,700	14,200	15,000	15,800	18,300
Alum Chine, Cliff Gardens	65,300	3,800	24,200	12,800	22,000	33,000
Cabstand, Gervis Road ..	6,600	8,300	5,000	5,200	4,300	4,000
.. Derby Road ..	11,600	17,300	3,500	15,100	6,400	4,200
Knyveton Road ..	14,300	18,800	9,200	7,600	5,200	5,200
Boscombe Gardens ..	37,800	48,300	83,300	58,000	41,500	57,400
East Yard ..	531,600	552,000	553,000	554,500	184,800	615,300
Cabstand, Spa Road ..	28,900	13,600	10,100	9,900	10,700	8,500
.. Adeline Road ..	22,000	6,700	5,400	9,700	13,300	10,900
.. Palmerston Road	8,600	3,400	2,000	2,000	2,700	5,200
Boscombe Depot ..	98,900	93,700	81,000	67,600	76,900	70,600
King's Park ..	58,000	111,800	161,100	166,800	130,700	60,700
East Cemetery ..	69,000	118,000	99,000	79,000	77,000	85,000
Sanitary Hospital..	445,300	552,400	581,200	448,000	522,300	463,000
Parkwood Road ..	170,700	109,700	112,800	81,200	68,300	88,000
Queensland Road..	167,000	123,700	20,800	18,400	41,400	20,900
Roselery Road ..	163,900	129,000	112,100	19,000	19,800	21,800
Clarence Park Road ..	116,200	100,700	18,500	8,900	15,000	12,000
Stourwood Avenue ..	91,800	103,400	10,900	7,800	500	1,100
Clifton Road ..	121,100	111,600	21,900	43,300	22,200	35,700
Stourwood Road ..	162,200	123,700	90,800	19,100	8,800	5,500
Fountain, Parkwood Road ..	59,600	39,700	48,100	11,600	30,500	31,100
Boscombe Cliff Gardens ..	13,600	27,100	48,100	76,400	29,800	47,000
Wharfedale Road ..	30,200	14,300	12,200	11,300	11,100	11,800
Electric Car Sheds ..	139,000	163,300	161,500	139,100	126,700	75,500
Knyveton Gardens ..	9,700	9,800	8,200	9,300	13,900	15,300
Meyrick Park Pavilion ..	100,900	77,100	102,600	146,000	82,100	90,700
*Golf Club, i.e., Caddies Shelters ..	133,100	153,700	162,500	133,200	112,600	136,000
Bourne Avenue Cabstand ..	63,200	51,100	24,000	30,600	32,100	18,900
Grinal, Westbourne ..	82,700	50,900	59,300	68,100	11,400	11,700
.. Triangle ..	223,900	41,700	46,000	17,500	39,000	60,300
.. Bourne Avenue ..	63,200	89,400	17,100	82,400	64,800	84,900
Ladies' Lavatory, Exeter Lane	60,700	86,700	97,200	128,300	130,200	102,200
Winter Gardens ..	112,500	672,300	506,300	181,600	270,000	318,600

Urinals, facing Pier	..	317,200	328,500	261,900	303,600	261,500	257,500
The Pier	..	176,500	312,700	324,100	257,300	300,100	234,700
„ (Special for Boats)		91,000	92,000	109,000	130,000	144,000	187,000
Urinal and Cabstand, The Westover	...	189,700	118,600	90,100	103,900	94,000	106,000
Urinal & Cabstand, Firs Glen		208,500	80,700	45,900	51,600	51,500	81,900
„ „ Lansdowne Cres.		182,000	128,800	79,200	81,300	81,400	90,100
Urinal & Fountain, Boscombe Gardens	..	179,200	233,500	102,500	101,500	65,800	94,400
Urinal, Carnarvon Crescent		414,500	88,500	79,000	76,600	91,700	78,800
		<u>7,578,900</u>	<u>6,888,700</u>	<u>6,311,000</u>	<u>5,869,900</u>	<u>5,180,100</u>	<u>5,175,100</u>

\*This meter supplies Bournemouth Golf Club, Meyrick Park Golf Club and Caddies' Shelter, Meyrick Park.

Four years record only can be shown of the following:—

		1905,	1906.	1907.	1908.
Bournemouth School	...	98,500	78,200	60,500	75,700
Mess Room at Tram Sheds	...	302,400	213,500	143,900	180,100
Winton Stables	...	36,100	41,300	43,900	16,900
Gervis Road Drinking Trough	...	9,700	15,100	12,600	13,900
Bowling Green Meyrick Park	...	6,400	9,000	5,600	16,500
Christchurch Road Depot	...	51,700	73,600	57,000	77,400
West Refreshment Rooms (recoverable)		22,300	23,100	43,400	62,500
East „ „ „		35,900	47,500	11,000	19,200
		<u>566,000</u>	<u>501,300</u>	<u>407,900</u>	<u>522,200</u>

Three years record only can be shown of the following:—

			1906.	1907.	1908.
Poole Hill Urinal	...	...	36,700	36,100	37,100
Alum Chine	...	...	25,600	28,500	40,600
Durley Chine	...	...	20,400	20,400	17,300
Boscombe Pier	...	...	82,800	61,300	134,800
The Square for watering lines	...	...	16,400	5,800	5,600
Queen's Park Caddies' Shelter	...	...	10,600	15,000	58,200
			<u>192,600</u>	<u>167,100</u>	<u>293,600</u>

Two years record only can be shown of the following:—

			1907.	1908.
Winton Recreation Grounds	...	...	29,400	93,600
Boscombe Refreshment Rooms	...	...	7,800	7,800
Pokesdown Tram Sheds	...	...	73,800	84,600
			<u>111,000</u>	<u>186,000</u>



The above list does not include the meter for Electric Generating Station, as the water used for the boilers since June, 1904, has been obtained from artesian well. The consumption of water from the Company's supply for the five years is as follows:—

1903	1904	1905	1906	1907	1908
6 months consumption.					
6,865,000	4,213,000	4,000	6,000	12,000	138,000

The increase in 1908 is due to defective pump for artesian well. Now in order.

## SANITARY INSPECTION AND CERTIFICATES.

During the year £239 18s. 6d. has been received in fees for the examination and testing of drainage and sanitary arrangements with the view of obtaining the Sanitary Certificate.

## STATEMENT OF ACCOUNTS.

Accounts rendered for:—

	£	s.	d.
Sanitary inspections ....	239	18	6
Maintenance of patients at the Sanitary Hospital ....	327	15	5
Conveyance of patients to Sanitary Hospital, and collecting and returning articles disinfected...	34	18	6
Disinfection after non-notifiable disease ....	31	12	9
Cleansing of W.C.'s, etc., at Public Elementary Schools ....	72	0	0
Meter checking at Public Elementary Schools ....	9	0	0
Emptying cesspools ....	15	16	0
Books, etc., as required by the Midwives Act ....	0	11	0
Works, etc., executed by Sanitary Authority and recoverable ....	9	14	5
Rent of Isolation Cottages ....	22	1	0
Rat Catcher's services ....	8	7	8
Hire of P.M. Room ....	1	8	6



### WATER SUPPLY.

66 separate supplies of water direct from main have been provided for supplying water for drinking purposes only.

411 cisterns have been cleansed under notice of advice.

### INFECTIOUS DISEASE.

During the year 602 cases of infectious disease (including chicken-pox and measles) have been notified, and each of the premises at which such cases have occurred have been inspected, and the usual enquiries made as to the source of the disease, school, employment, etc.

Reports giving the particulars of the enquiries made and the result of the inspection have been supplied to the Medical Officer of Health respecting each of the above cases.

The drainage and sanitary arrangements of nearly all the premises where infectious disease has been notified have been tested—measles and chicken-pox cases excepted. The usual notices were served on the owners or occupiers, calling their attention to the defects, and requesting them to remedy the same. The necessary alterations have been made in each case. The house drains and sewers, where necessary, have also been flushed by the Disinfector.

Where the patient is not removed to the Hospital, the Inspector for the district insists on isolation as far as practicable, and a pamphlet form of suggestions is left at the house where the patient resides, giving particulars as to the nursing, disinfection, penalties, etc.

In cases occurring among school children notice is sent to the school teacher, advising that any other children of the same family or household be kept in quarantine for the necessary number of days. 1,007 such notices have been served upon the school teachers, and also the parents of the children.

The amount of fees paid for notification of infectious

disease during 1908 was £70 9s. 0d. including £32 5s. 0d. for measles, and £4 0s. for chicken-pox.

The total number of articles, including bedding, etc., that have been disinfected by the Disinfector (Benjafield) at the Sanitary Hospital is 2,167. These articles have been disinfected by means of Washington Lyon's Dry Air and Steam Disinfecting Apparatus.

The following is a list of rooms, wards, public conveyances, etc., which have been fumigated during the year :—

	608 Rooms
	123 Wards (Hospital)
	—
Total	731
	—

In addition to this 201 rooms have been stripped and re-papered, two wards at the Victoria Hospital washed down and painted, and the drains at the Sanitary Hospital have been disinfected 100 times.

### SMOKE OBSERVATIONS.

During the year 27 smoke observations for a period of 60 minutes have been taken and the necessary statutory notices have been served for the abatement of the nuisance, 7 general inspections of the district for observations of the chimneys have been made, and 7 observations were made of special premises.

It has not been necessary to take formal proceedings in any case reported to your Authority.

### ACTION TAKEN FOR ABATEMENT OF NUISANCES.

731 Nuisances complained of have been attended to and the defects remedied.

1822 Letters and reports *re* insanitary premises have been written, including Special Reports for Sanitary Certificates.

225 Preliminary notices have been served.

54 Premises have been formally reported to the Sanitary Committee.

471 Premises have been inspected, and the necessary alterations executed to abate nuisances which were detected on making general inspections of the Borough.

54 Formal notices have been served.

### CESSPOOL DRAINAGE AT WINTON AND POKESDOWN DISTRICTS.

During the past year the following works have been executed in connection with the emptying of cesspools in the above-named districts :—

#### WINTON DISTRICT.

Number of cesspools emptied	....	378
Number of loads of sewage removed	....	962
Number of cesspools condemned and filled in	....	124

#### POKESDOWN DISTRICT.

Number of cesspools emptied	....	15
Number of loads of sewage removed	....	36
Number of cesspools condemned and filled in	....	11

The Patent Exhaust Cart has worked very satisfactorily during the year.

Nearly all the sewage from the cesspools emptied during the year was carted and utilized at Strouden Farm.

#### *Expenditure.*

	£	s.	d.	£	s.	d.
2 Corporation men at 4s. 4d per day	203	8	0			
2 horses at 11/- per week ...	57	4	0			
				260	12	0

#### *Repairs, &c.*

Disinfectants (approx.) 6s. per week	15	12	0			
Oil ... ..	2	10	0			
Coke .. ..	2	10	0			
				20	12	0
				£281	4	0

*Income.*

Amount received for hire of carts (Winton) .. ...	19	0	0	
Amount received for hire of carts (Pokesdown) ... ..	0	10	0	
				<hr/> 19 10 0
Total cost of working carts for the year	£261	14	0	<hr/>

## PIGGERIES IN THE WINTON AND MOORDOWN DISTRICT.

The piggeries have been periodically inspected during the past year. There are 14 piggeries in this District, all situated without the prescribed distance of 150 feet from the nearest dwelling-house.

Two piggeries have been removed.

Three complaints have been received, and nuisances abated in each case.

One notice was served on the owner to cause the piggery to be repaved and drained.

There are now only about 70 pigs kept in this District.

## POKESDOWN DISTRICT.

General inspections have been made of the piggeries in this District nearly all of which are situated in the Southbourne Ward.

Several complaints have been received as to the nuisance from piggeries situated just outside the Bourne-mouth Borough boundary, and these have been attended to in the same way as if they were situated in Bourne-mouth.

At the present time there are 24 piggeries in this District and the approximate number of pigs kept is 355.

## SUMMARY OF SANITARY OPERATIONS.

*For the Year ending December 31st, 1908.*

## 1.—INFECTIOUS DISEASE.

	District No. 1.	District No. 2.	District No. 3.	District No. 4.	Total.
Infectious Cases reported to M.O.H. (including 59 cases of Chicken-Pox)...	111	120	91	280	602
No. of Premises tested ... ..	44	22	15	79	160
Subsequent tests ... ..	23	2	12	30	67
No. found to be defective ... ..	37	4	10	46	97
No. of Preliminary Notices served ...	29	6	6	38	79
No. of Preliminary Notices complied with	25	6	1	9	44
No. of Notices <i>re</i> Isolation ... ..	407	106	47	447	1007
No. of Rooms disinfected ... ..	214	33	109	252	608
No. of Rooms cleansed and lime washed	43	22	51	85	201
No. of Articles disinfected removed from dwellings ... ..	220	217	373	212	1052
No. of Articles disinfected at the Hospital	—	—	—	—	2176
No. of House drains, &c., flushed with disinfectant ... ..	1	—	4	6	11
No. of Notices to Public Librarian ...	16	1	12	43	72
No. of Articles destroyed ... ..	169	—	34	128	331
No. of Books disinfected ... ..	19	2	42	64	127
Total amount of A/cs submitted to the Borough Accountant for collection for maintenance of patients at hospital ...				£327 15s. 5d.	
Amount for Horse Hire ... ..				£34 18s. 6d.	
Total No. of visits by Inspectors ...	653	191	237	440	1521
Total No. of visits by Disinfectors ...	316	73	227	489	1105

## 2.—NON-NOTIFIABLE DISEASE.

No. of Certs. <i>re</i> Phthisis ... ..	20	2	23	32	77
No. of rooms disinfected ... ..	24	2	36	57	119
No. of rooms disinfected after other non- notifiable diseases ... ..	29	1	36	58	124
No. of articles removed for disinfection	88	—	121	33	242
Amount for disinfection ... ..				£31 12s. 9d.	
Total No. of visits by Disinfectors ...	82	7	113	130	332

## 3.—NUISANCES.

No. of complaints received and attended to ... ..	80	*451	86	114	731
No. of premises tested ... ..	17	9	24	61	111
No. of preliminary notices served ...	32	31	28	25	116
No. of preliminary notices complied with	33	12	25	9	79



No. of general inspections of the district	99	31	72	12	244
No. of nuisances detected ... ..	85	242	130	14	471
No. of nuisances abated after verbal advice ... ..	61	73	116	24	274
No. of preliminary notices served ...	10	11	15	8	44
No. of preliminary notices complied with	15	5	2	4	26
No. of premises with drains and fittings repaired ... ..	44	15	11	46	116
No. of premises with ditto reconstructed	7	—	—	23	30
No. of nuisances reported to Sanitary Authority ... ..	38	7	5	4	54
No. of statutory notices served ...	38	7	4	5	54
No. of visits <i>re</i> nuisances ... ..	1155	287	2099	1165	4706

\*Including Complaints *re* Cesspools.

#### WINTON DRAINAGE FOR YEAR ENDING DECEMBER 31st, 1908.

No. of Plans deposited and reported on ...	...	...	133
No. of drains tested with water test ...	...	...	200
No. of drains tested with smoke test ...	...	...	164
No. of visits <i>re</i> supervision of works, &c. ...	...	...	487

#### 4.—PRIVATE INSPECTIONS AND CERTIFICATES.

No. of applications received ... ..	43	9	115	69	236
No. of premises examined and tested ...	28	8	111	46	193
Subsequent water tests ... ..	20	9	85	51	165
Subsequent smoke tests ... ..	12	4	77	27	120
Amount received ... ..				£239 18	6
No. of premises with drains and fittings repaired ... ..	21	1	75	23	120
No. of premises with ditto reconstructed	3	2	12	13	30
No. of new certificates granted ...	13	5	19	30	67
No. of visits ... ..	499	45	1032	515	2091

#### 5—NEW BUILDINGS

No. of premises tested with water test ...	255	310	69	91	725
No. of premises tested with smoke test...	225	226	36	100	587
No. of premises tested with water, 2nd and subsequent tests ... ..	123	25	81	56	285
No. of premises tested with smoke, 2nd and subsequent tests ... ..	27	1	20	11	62
No. of reports to Building Inspector <i>re</i> defects ... ..	149	91	2	43	285
Total number of water tests ... ..	378	335	150	117	1010
Total number of smoke tests ... ..	252	230	56	111	649
Total number of visits made by Inspector during the month ... ..	631	682	331	330	1974

## 6—SUMMARY OF NOTICES SERVED

For abatement of nuisances under the  
Public Health Acts and Bournemouth

Improvement Act	...	...	33	25	13	32	103
Notices under Bye-laws	...	...	—	—	9	15	24
Notices <i>re</i> infectious disease	...	...	34	7	7	47	95
Notices on books not complied with	...	...	49	12	13	59	133
Total number of reports made	...	...	28	8	111	46	193
Total number of letters written	...	...	—	—	—	—	1629

## 7—WATER SUPPLY

No. of samples taken for M.O.H.	...	...	...	6
No. of cisterns cleansed after notice	...	...	...	411
No. of taps fixed on rising main	...	...	...	66
No. of meters checked weekly during the year	...	...	...	18
No. of meters checked fortnightly during the year	...	...	...	21
No. of meters checked monthly during the year	...	...	...	213

## SUMMARY OF DRAINAGE WORKS IN CONNECTION WITH THE NEW SCHEME OF SEWERAGE IN THE WINTON DISTRICT.

Three hundred and sixty-four houses have been drained to the new sewers in this District during the past year, including the drainage of 240 new houses. Since the main outfall was completed in 1904, 2007 houses (new and old properties) have been drained and connected up to the present sewerage system and 1284 cesspools have been abolished and filled in.

There are at present 132 houses yet to be dealt with in roads which have been sewered. During the present year formal action will be taken with the view of enforcing new drainage for old properties not yet connected up to the public sewers which have been constructed by your Authority.

The following roads as soon as sufficiently developed will require to be sewered and made up under the Private Street Works Act, 1892:—

Pine Road (remainder)	Easter Road
Castle Road ..	Limited Road
Brassey Road ..	Crichel Road
Wynyard Road	Somerley Road
Evelyn Road South	Abbott (remainder)
Naseby Road	

## SUMMARY OF VISITS REQUIRING THE ATTENTION OF THE CHIEF SANITARY INSPECTOR.

1681 Visits were made during the year including special visits *re* the following matters :—

(1) Re-arrangement of combined systems of drainage at the Lansdowne Crescent, Essex Terrace and Commercial Road, and 278 to 284, Old Christchurch Road.

(2) Special inspections of the two Common Lodging Houses for the renovation of properties generally and re-measurement and re-arrangement of sleeping accommodation.

(3) Elementary Schools in the County Borough *re* structural special improvements (4), Infectious cases (20). In cases where the children of the same family were found to be suffering from diphtheria and measles a special nurse was engaged under the provisions of the Bournemouth Improvement Act.

(4) Improvements at bakehouses (7).

(5) Special inspections for improvements at three Marine Stores

(6) Improvements for storage and removal of house refuse at Boscombe Arcade, House Refuse Pitch, Queen's Park, the Bungalow Huts on Foreshore.

(7) Smoke nuisances (10).

(8) Workshops and workrooms (12), and special appliances for fire escape in three instances.

(9) Defective main sewers passing under Shaftesbury Hall and Gymnasium, also in Cavendish Road. Flooding of Holdenhurst Road sewer, Horse Shoe sewer.

(10) Nuisances from improper keeping of Poultry (17).

(11) New drainage for St. Peter's Hall, East Common Hospital, Boscombe Temperance Hall, St. Paul's Church, The London Hotel, Electric Light Offices, Grand Hotel, St. Ambrose Schools, Council Schools, Middle Road, Model Dairy, Holdenhurst Road, Halnemann Home, Herbert Home, Boscombe Gardens Pavilion, The Hippodrome, The Baths, Winton Depot and Pleasure Grounds Pavilion.

(12) Special inspections of lock-up-shops without sanitary conveniences (10).

(13) Catchpit nuisances in Westbourne and Boscombe, and *re* nuisance of sewer gas from up-cast ventilators at Boscombe and Richmond Park.

(14) Overcrowding nuisances (5).

(15) Visits *re* Special Outbreaks of Infectious Disease at—

4 Private Schools (measles).

3 Large Boarding Houses (scarlet fever).

Southbourne District (scarlet fever).

Spring Road Infants' School (measles and diphtheria). Closed on latter occasion.

St. Clement's Infants' School (measles).

St. John's           ..           ..       (measles).

St. Andrew's       ..           ..       (measles). Closed.

St. Paul's           ..           ..       (measles). Closed.

St. Peter's          ..           ..       (measles).

St. Walburga's     ..           ..       (measles).

Pokesdown C.       ..           ..       (measles).

## PUBLIC MORTUARY.

The new Public Mortuary, built at the Central Depot, was opened on March 28th, 1907.

There are three separate buildings, comprising the Coroner's Court, Mortuary and Post-Mortem Room, all of which are fitted with the latest and most up-to-date arrangements. The general supervision of the premises is under the control of this Department, and printed Regulations as to the general management have been drawn up by your Sanitary Committee and sent to all the Medical men and Undertakers in the Borough.

From January 1st, 1908, to December 31st, 1908, the total number of Inquests was 47 and Post-Mortems 29.

The total cost as to working expenses for the year 1908, so far as this Department is concerned, is as follows:—

	£	s.	d.
Proportion of Attendant's wages for daily cleansing	10	8	0
Attendance ... ..	16	8	0
Gas from Dec. 19th, 1907, to Dec. 19th, 1908 ...	0	12	5
Disinfectants, soap, &c. ... ..	0	16	10
Washing, &c. ... ..	0	6	10
Special requirements for Post-Mortems, such as Gloves, &c. ... ..	1	17	6
Meter rents ... ..	0	12	0
	<hr/>		
	£31	1	7

Fees recovered for private Post-Mortem ...	1	8	6
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N.B.—The water supply for the Mortuary, &c., is taken from the main supplying the Central Depot, and is not separately charged.

## PUBLIC CONVENIENCES.

*Working Expenses of Public Conveniences from December, 1907  
to December, 1908.*

	£	s.	d.
Repairs to conveniences, including cost of automatic lighting ... ..	96	6	2
Wages paid to attendants ... ..	397	17	4
Gas and water, and hire of meters ... ..	97	13	10
Disinfectants soap, brushes, laundry work, etc.	36	18	2
	<hr/>		
	£628	15	6
<hr/>			
Total Receipts ... ..	832	12	4
Expenses ... ..	628	15	6
	<hr/>		
Balance ...	£203	16	10



Statement of Receipts from Public Conveniences from December, 1907, to December, 1908.

Convenience.		January		February		March		April		May		June		July		August		September		October		November		December		Total																		
		£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.																
Ladies	Lavatory near the Pier	..	2	10	5	4	16	9	5	3	9	13	9	2	9	5	0	18	2	10	23	0	6	42	4	7	30	13	9	5	10	1	4	11	1	3	0	1	162	8	0			
"	near the Square	..	7	11	3	7	18	9	8	6	6	16	5	1	11	16	1	20	11	3	21	15	8	36	14	7	30	9	9	14	16	7	10	7	2	8	12	11	195	5	7			
Gents'	near Pier Approach..	..	2	1	4	3	3	8	3	10	1	7	6	3	4	16	6	8	7	0	11	12	0	17	12	7	12	19	3	6	5	6	3	6	9	2	6	11	83	7	10			
"	near Lansdowne ..	..	3	12	1	3	2	4	2	13	0	4	6	11	3	1	2	1	6	2	5	9	10	7	8	1	6	15	11	4	7	8	3	3	2	2	17	9	51	4	1			
"	near Westover Road ..	..	2	16	8	2	10	1	2	13	10	4	7	0	2	6	6	3	4	7	4	15	11	3	6	0	4	15	11	3	6	0	2	2	5	2	6	1	38	10	8			
"	near Bourne Avenue ..	..	2	17	0	2	10	8	2	3	2	3	10	10	2	17	6	3	12	0	4	11	7	3	0	1	4	11	7	3	0	1	2	10	7	2	1	11	38	6	5			
"	near Carnarvon Crescent	..	2	19	1	2	0	10	1	18	7	2	7	4	1	19	0	2	10	4	2	12	5	3	4	11	3	5	1	2	4	11	1	19	5	1	16	4	28	18	3			
Ladies'	Boscombe Gardens ..	..	0	9	1	0	11	6	0	12	5	1	14	11	1	14	5	2	6	7	2	8	1	6	10	8	6	17	8	2	5	3	0	12	14	0	10	9	26	14	3			
Gents'	Poole Hill ..	..	1	18	10	1	17	0	1	15	1	2	10	10	1	18	7	2	4	3	2	2	11	3	4	0	2	19	10	2	0	8	1	4	4	1	12	0	25	8	4			
"	The Triangle..	..	1	13	0	1	8	2	1	8	4	1	18	6	1	11	2	2	2	3	1	19	10	2	19	9	3	2	10	2	2	3	1	10	2	1	8	6	23	4	9			
"	Horse Shoe ..	..	1	18	2	1	17	5	1	11	6	2	2	7	1	13	1	2	1	1	2	3	6	2	9	5	1	14	6	0	11	11	1	15	10	1	10	10	21	9	10			
"	Westbourne ..	..	1	19	11	1	10	10	1	6	6	2	4	6	1	12	6	1	15	11	1	14	11	1	12	3	1	16	1	1	5	6	1	4	10	0	19	2	19	2	11			
"	Boscombe Gardens ..	..	0	11	5	0	11	10	0	12	10	1	11	5	1	2	6	1	15	3	2	5	1	5	14	11	3	13	10	1	8	2	0	16	0	0	11	0	20	14	3			
"	Engine House ..	..	0	17	0	0	13	2	0	10	5	1	1	10	0	11	10	1	1	6	1	6	8	2	0	10	1	11	7	0	15	5	0	9	11	0	7	7	11	10	9	1		
"	and Ladies', Boscombe Lawn Tennis..	..	0	5	0	0	7	8	0	13	0	1	0	5	0	17	5	0	19	2	0	15	11	1	13	7	1	5	5	0	12	11	0	6	1	0	5	0	9	1	7			
"	Bournemouth Lawn Tennis ..	..	0	4	0	0	3	11	0	10	9	0	4	7	0	11	1	0	10	7	0	7	10	0	8	0	0	6	10	0	2	8	0	5	3	0	3	9	3	19	3			
"	Knyveton Lawn Tennis ..	..	0	0	0	0	1	0	1	0	1	0	2	10	0	1	9	0	3	3	0	2	8	0	3	0	0	4	10	0	3	10	0	1	4	0	0	8	1	6	11			
"	Alum Chine ..	..	0	11	7	0	11	4	0	12	8	1	6	8	1	6	6	2	6	1	2	4	2	6	4	2	5	12	10	3	1	2	1	0	11	0	12	4	25	13	5			
"	Durdley Chine ..	..	0	18	8	0	18	2	0	19	7	1	7	7	1	3	1	1	6	2	0	18	4	2	5	2	2	2	1	5	1	8	11	0	17	6	0	13	11	14	18	6		
"	Lavatory, Boscombe Cliff Gardens	..	..	0	0	6	0	1	8	0	1	0	0	3	11	0	3	1	0	6	2	0	4	10	0	4	5	0	2	11	0	2	9	0	1	3	0	1	0	1	13	6	8	
"	King's Park ..	..	0	2	10	0	4	7	0	3	10	0	6	9	0	5	2	0	5	7	0	8	2	0	12	9	0	8	0	8	0	6	5	0	5	0	3	0	4	4	3	13	8	9
Ladies'	Meyrick Park ..	..	0	1	5	0	2	3	0	3	1	0	2	7	0	6	2	0	5	9	0	8	10	0	6	0	0	11	3	0	4	5	0	2	5	0	2	4	2	16	9	9		
Ladies'	Lavatory, Cemetery	..	..	1	9	11	1	13	6	1	5	11	2	3	2	1	12	8	1	14	7	2	1	8	2	12	4	2	7	7	2	6	0	1	16	4	1	10	3	22	13	11		
Gents'	Lavatory, Meyrick Park ..	..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
TOTAL		37	9	10	39	0	1	38	17	2	71	15	8	52	15	9	81	18	4	93	12	10	155	11	5	128	12	10	58	10	9	40	11	5	33	16	3	832	12	8				

SUMMARY OF SPECIAL REPORTS PRESENTED  
TO THE SANITARY COMMITTEE FOR CON-  
SIDERATION DURING THE YEAR 1908.

(1) As to the cleansing and purifying of passages and staircases leading to workrooms.

(2) As to the new and additional duties devolving upon the Department due to the coming in force of the (1) Public Health Acts' Amendment Act, (2) Public Health (Regulations as to Food) Act, (3) Butter and Margarine Act, (4) Factory and Workshops Act.

(3) Underground bakehouses, 12, Commercial Road, 274, Old Christchurch Road, and 250, Old Christchurch Road.

(4) Lock-up-shops.

(5) Smoke nuisances arising from the chimney flues in connection with the large hotel kitchens.

(6) As to the provision of fire escapes in the large workrooms situated above the ground floor, and for the purpose of framing bye-laws relating to same.

(7) Special duties of attendants at the public mortuary.

(8) On the re-organization of duties and supervision of the public ambulances.

(9) Duties relating to the Midwives' Act, 1902.

(10) As to the supply of disinfectants used for cleansing and deodorizing special premises.

(11) Special report *re* the amount of water used for flushing purposes at the public conveniences and suggestions as to the re-modelling of the flushing arrangements, so as to bring same up-to-date.

(12) A detailed report of the statistics relating to

the five years' working in connection with the notification of measles was compiled for the Medical Officer of Health's Report to the Local Government Board.

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In conclusion, I beg to thank the Chairman and Members of the Sanitary Committee for the consideration they have at all times given to the questions affecting the work of the Department in particular, and for the encouragement and help they have given at all times for the improvement and maintenance of the sanitary administration and reputation of the Borough.

I remain, Gentlemen,

Your obedient servant,

WM. GEO. COOPER,

Chief Sanitary Inspector.

# COUNTY BOROUGH OF BOURNEMOUTH

## ANNUAL REPORT OF THE PUBLIC ANALYST

*For the year ending 31st December, 1908.*

TO THE MAYOR AND TOWN COUNCIL,  
BOURNEMOUTH.

GENTLEMEN,—

I have the honour to present my report upon the samples of Food and Drugs analysed by me during the year 1908, and in doing so I have great pleasure in recording that the improvement to which I referred in my last two reports has been practically maintained.

The total number of samples received during the year was 400, of which 300 were “official” and 100 “unofficial” samples. Of the official samples, 21 proved to have been adulterated or deficient in some essential constituent and 36 were of poor or doubtful quality, whilst of the 100 unofficial or test samples 18 were adulterated or deficient, and 16 of poor or doubtful quality, the percentages of the whole being,—adulterated 9·75 per cent., poor or doubtful 13 per cent. In table I. these results are compared with former years :—

TABLE I.

Year.	Adulterated.	Poor or Doubtful.
1902.	15·8 per cent.	11·8 per cent.
1903.	12·3       ,,	9·0       ,,
1904.	16·6       ,,	14·3       ,,
1905.	14·0       ,,	11·6 per cent.
1906. (official.)	9·0       ,,	13·3       ,,
,, (unofficial)	18·0       ,,	10·0       ,,
,, (total)	11·25       ,,	12·5       ,,
1907. (official)	8·0       ,,	14·0       ,,
,, (unofficial)	12·0       ,,	9·0       ,,
,, (total)	9·0       ,,	12·75       ,,
1908. (official)	7·0       ,,	12·0       ,,
,, (unofficial)	18·0       ,,	16·0       ,,
,, (total)	9·75       ,,	13·0       ,,

Tables II. and III. indicate generally the results obtained with the official and unofficial samples respectively :—

TABLE II.  
Summary of Annual Report 1908 (300 official samples).

ARTICLE			No. of Samples	Genuine	Poor or doubtful	Coloured	Contained Preservative	Adulterated	Percentage adulterated	REMARKS
New Milk	..	...	106	82	17	93	0	7	6.6	No. 57. 15½ per cent. deficient in Cream, No. 114. 3 per cent. do. ; Nos. 199, 200, 201, 203 and 204*
Butter	..	..	31	26	3	—	9	2	6.15	No. 12. Boric acid .65 per cent., No. 251 contained 10 per cent. margarine
Jam	..	..	12	9	3	—	1	0	—	
Honey	..	..	5	5	0	—	0	0	—	
Ale	..	..	21	21	0	—	—	0	—	
Whisky	..	..	4	2	1	—	—	1	25.0	No. 25. One-third silent spirit
Sausages	..	..	12	12	0	—	8	0	—	(See below)
Potted Meats	..	..	14	14	0	2	2	0	—	..
Mince-Meat	..	..	12	10	0	—	3	2	16.66	No. 284. 1.5 grains salicylic acid per pound ; No. 288. 2.8 grains salicylic acid per pound
Mustard	..	..	7	6	1	—	—	0	—	No. 231. Damp
Cayenne Pepper	..	..	8	8	0	—	—	0	—	
Mixed Spice	..	..	5	5	0	—	—	0	—	
Ground Caraway	..	..	6	4	2	—	—	0	—	No. 267. Essential oil 2.1 per cent. ; No. 273, essential oil 2.05 per cent.
Ground Cloves	..	..	3	1	2	—	—	0	—	No. 269. Essential oil 13.6 per cent. ; No. 274. essential oil 13.5 per cent.
Ground Allspice	..	..	3	1	0	—	—	2	66.66	No. 275. Essential oil 1.03 per cent. ; No. 281 was mixed spice with 2 per cent. sand
Ground Mace	..	..	2	1	0	—	—	1	50.0	No. 272. Essential Oil 1.97 per cent.
Tartaric acid	..	..	1	1	0	—	—	0	—	
Cream of Tartar	..	..	7	5	2	—	—	0	—	No. 67. Total impurities 3.2 per cent. ; No. 68. total impurities 2.9 per cent.
Potash Wafer	..	..	1	0	1	—	—	3	75.0	No. 192. Deficient 80 per c. No. 195. do. 78 per c.
Lithia Water	..	..	5	0	3	—	—	2	40.0	No. 198. do. 90 per c. No. 196. Deficient 87½ per c. No. 197. do. 100 per c.
Other Drugs	..	..	32	30	1	—	—	1	3.12	No. 34. Deficient in caffeine 17.1 per cent.
			300	243	36	95	23	21	7.0	

\*See below.



TABLE III.  
Summary of Annual Report, 1908 (unofficial samples).

ARTICLE	No. of Samples	Genuine	Poor or doubtful	Coloured	Contained Preservative	Adulterated	Percentage Adulterated	REMARKS
Butter .. ..	15	13	1	—	5	1	6·6	No. 90. 6·3 per cent. excess of water
Do., milk-blended ..	3	1	1	—	2	1	33·33	No. 67. Curd 4·35 per cent., salt 6·5 per cent.; No. 68, excess of water 1·6 per cent
Do., substitute .. ..	3	3	—	—	—	0	—	Mainly cocoa-nut oil
Margarine .. ..	3	3	—	—	1	0	—	ditto
Cream .. ..	6	4	—	—	6	2	33·33	No. 16. See below
								No. 63. 52 per cent. boric acid
Cream Cheese .. ..	12	7	1	—	2	1	8·33	No. 55. Fat equal 2·15 per cent.
Coffee .. ..	1	1	—	—	—	0	—	
Tinned Salmon .. ..	1	0	—	—	1	1	100·0	Decomposing
Lime Juice .. ..	1	0	1	—	1	0	—	No. 81. 3·6 grains of SO <sub>2</sub> per pint
Do., Cordial .. ..	7	5	1	2	5	1	14·3	No. 77, 78, 79 and 80 contained salicylic acid 3·06, 5·25, 87 and 3·06 grains per pint; Nos. 79 and 82 each contained 1·24 grains SO <sub>2</sub> per pint
Lemon Squash .. ..	6	4	—	1	6	2	33·3	No. 84, 86, 87, 88 and 89 contained 1·3, 2·6, 0·77, 3·4 and 4·28 grains salicylic acid per pint; No. 85 contained 4·96 grains SO <sub>2</sub> per pint
Sweets .. ..	18	18	—	18	—	0	—	See note below
Potash Water .. ..	6	1	3	—	—	2	33·3	Potash bicarbonate 1·3, 16·4, 6·7, 1·9, 7·7 and 5·0 grains per pint
Lithia do. ....	9	3	2	—	—	4	44·4	Lithium carbonate mere trace, none, 11·5, 11·4, 9·25, mere trace, none, 7·25 and 3·7 grains per pint
Tincture Iodine .. ..	9	3	3	—	—	3	33·3	No. 95. 9 per cent. deficient in Iodine; No. 97, 36 per cent. excess iodine; No. 99, 50 per cent. excess iodine.
	100	66	16	21	29	18	18·0	

#### NOTES ON RESULTS OF ANALYSES. MILK.

In my report for 1907 I was able to record an exceedingly small percentage of adulterated samples, viz.

2.0 per cent.; this year the percentage has risen to 6.6, but no fewer than five of these samples (= 4.7 per cent.) were from one vendor taken on two successive days, hence the condition of the milk supply may be considered to be much more satisfactory than those figures would suggest. These five samples all contained added water in quantities as follows:—10, 1,  $1\frac{1}{2}$ , 5 and 10 per cent. It is also a matter for congratulation to find that the percentage of poor samples has fallen from 27.0 per cent. to 16.0 per cent. The addition of Annatto for colouring purposes still continues to be fairly general throughout the Borough, 87.7 per cent. of the samples being so coloured, against 90.7 last year.

The average composition of milk during the year, excluding the adulterated samples has been milk fat 3.58 per cent.; non-fatty solids 8.92 per cent. water 87.5 per cent.. these figures are almost identical with those for 1907.

No preservatives have been detected during the year.

### CREAM.

Of the 6 "test" samples examined, none was found to be free from Boron preservative, and one sample contained more than double the amount allowable. the proportions actually found were 0.13, 0.24, 0.24, 0.21, 0.23, 0.25, and 0.52 per cent. The first of these samples (No. 16) was sold as "sterilized Cream," a description which implies absence of chemical preservatives. it was also a heavily adulterated article, containing only 22.9 per cent. of milk-fat instead of about 50 per cent., and also 15.5 per cent. of solids-not-fat, which should be only about 5 per cent.

In my opinion vendors of articles of this character, having names which imply superiority over the ordinary article of trade but being in reality very inferior, should receive the most severe treatment that the law permits, the goods are usually sold at enhanced prices, and as their use is largely amongst invalids or weakly persons the deception is one of the most despicable that can be imagined.

## CREAM CHEESE.

Of this article 12 "test" samples were taken, and on analysis proved to contain on an average 43·2 per cent. of milk-fat and 16·95 per cent. of Proteids. One sample, however (No. 55) contained only 2·15 per cent. milk-fat, whilst others (Nos. 52, 56, and 58) contained only 3·73, 3·31, and 2·45 per cent. of proteids respectively. Two contained Boron preservative but none in excess.

## BUTTER.

This article has again been maintained at a high standard of purity, only 3 samples being found adulterated out of 46, one of these contained only a small excess of Boron preservative. In addition to these there were 4 "doubtful" samples, which, if not pure, could have contained only a very small percentage of adulterant.

## SAUSAGES, POTTED MEAT, &amp;c.

Of 12 samples of sausages 8 contained Boron preservative in quantities varying from 0·17 per cent. to 0·41 per cent. of Boric Acid, and of 14 samples of potted meats, fish, &c., only 2 contained 0·29 and 0·30 per cent. of Boric Acid. These results are even more satisfactory than those recorded in 1907. The valuable report on this subject, which was issued from the Local Government Board is calculated to greatly reduce the use of preservatives in goods of this class, it was there shown that preservatives are unnecessary as the meats can be properly preserved without their use, and moreover the presence of such preservative is quite sufficient to raise a very strong suspicion that its use had been resorted to in order to prevent the further decomposition of meat which was in danger of becoming bad either before or during the process of preparation and canning.

Test sample No. 75—tinned salmon—was in a state of incipient decomposition and contained Boric Acid in the proportion of 0·12 per cent. in the fish and 0·21 per cent. in the liquor.

## SPICES.

Spices owe their special character as to aroma and flavour to certain volatile or essential oils and pungent principles. Usually the amount of pungent principle is not altered by keeping, provided that the spice is not allowed to become damp or mouldy, on the other hand the essential oils are liable to be *very slowly* lost by evaporation if the spice is exposed to the air, hence they should be stored in tins, well-fitting drawers or other suitable receptacles. It is, of course, the business of the grocer to know this, and he should take precautions accordingly.

Of the various spices examined in 1908 no fewer than 6 were found to be deficient in essential oil, but in most cases the deficiency was not so serious as to warrant reports of adulteration, although the samples were far below the average value of genuine samples as shown in the following table. :—

TABLE IV.

Article.	No. of Sample	Essential Oil.	Average of Essential Oil.	Spirit Extract.	Average of Spirit Extract.
Ground Caraway	267	2.4	3.07	3.5	3.73
" "	273	2.05	3.07	3.6	3.73
Cloves ..	269	13.6	15.8	—	—
" ..	274	13.5	15.8	—	—
Allspice ..	275	1.03	2.67	2.65	5.5
Mace ..	272	1.97	7.56	—	—

Nos. 267, 269, 273 and 274 were reported as being of poor quality, the deficiency being only such as might possibly be due to long exposure, but Nos. 272 and 275 were reported as adulterated. Other tests indicated the presence of "wild mace" in sample 272, "wild mace" being the name given to the product of an entirely different plant which is quite valueless for flavouring purposes. A comparison of the figures given by No. 275 with the averages for ground allspice shows that the essential oil had been removed by spirit extraction, the "spirit extract" as well as the essential oil being below one-half the average figure. The vendor of this sample was summoned and ordered to pay the costs of the prosecution.



## LIME JUICE, LIME JUICE CORDIAL, AND LEMON SQUASH.

Fourteen test samples were taken, and with two exceptions all contained either salicylic or sulphurous acid or both. The proportion of salicylic acid varied from 0.77 grain to 5.25 grains per pint, and this preservative occurred in 9 of the samples. Sulphurous acid occurred in 4 samples, the quantity ranging from 1.24 grain (2 spls.) to 4.96 grains in each pint, calculated as  $\text{SO}_2$ . I am of opinion that the amount of preservative found in three of the samples must be considered as unnecessary and injurious, viz. :—Nos. 78 (lime juice cordial) and 89 (lemon squash) with 5.25 and 4.28 grains of salicylic acid respectively, and No. 85 (lemon squash) with 4.96 grains of anhydrous sulphurous acid in the pint. The sample of lime juice No. 81 contained 3.6 grains of sulphurous acid per pint, but as this is used in a much greater dilution than the cordial, the quantity can scarcely be considered harmful. Nos. 82, 83, and 87 each contained a coal-tar dye.

## SWEETS.

Although all these samples contained a colouring matter of some kind, in no case could any injurious colour be detected. Rhodamine and thioflavin were those most commonly used; two contained traces of oxide of iron; one chlorophyll; and a few other coal-tar colours. Several of the samples were "mixed sweets" having 3 or more different colouring agents.

## LITHIA WATER, POTASH WATER.

In June 15 test-samples were taken, the results indicating a lamentable condition of affairs, 2 of the lithias being entirely devoid of that substance and 2 others containing only traces, whilst 2 of the potash waters contained less than 2 grains of potassium bicarbonate per pint. The other samples of potash water varied from 5.0 to 16.4 grains of bicarbonate per pint,



whilst the amount of lithium carbonate in the lithia water ranged from 3.7 grains to 11.5 grains per pint. Subsequently 9 samples were taken officially, and of these 3 of potash water were deficient 80, 78 and 90 per cent. respectively, as judged by the lowest standard commonly adopted, viz.—5 grains of potassium bicarbonate per pint. Of the 5 samples of lithia water No. 197 was wholly devoid of lithium carbonate, whilst No. 196 contained only 1.2 grains in each pint.

In the proceedings which followed, the vendors of Nos. 197 and 198 were fined, but the case against the vendors of No. 196 was dismissed after a second hearing, the magistrates being unable to agree at the first sitting. In this case the defence urged that there is no standard for Lithia Water, or in other words that each manufacturer is at liberty to put in any proportion of Lithia he may think fit—from traces up to full medicinal doses—without any notification of the amount. This astounding proposition was made notwithstanding the fact that it was given in evidence that the standard of the British Pharmacopœia of 1867 and 1885 had been authoritative for 31 years without any published protest on the part of manufacturers or the medical profession, and no other standard was even suggested as an alternative by the defence. The magistrates were probably influenced largely by the evidence of a prominent witness for the defence, who stated that he *preferred* Lithia Water containing only 1 grain in a pint, rather than that of the 1885 Pharmacopœia containing 10 grains in a pint, as he prescribed the Lithia *separately*. It is obvious that if such a precedent were followed we should have individual medical men who have a preference for Lithia Water (or what not) of a special strength causing the utmost confusion without any notification to the public or to other medical men. The standard of 10 grains per pint has been in use since Lithia Water was first made about the year 1860 until the present time, it is still adopted by large numbers of makers in both a large and small way of business and, so far as my experience goes, is still desired by the majority of the medical profession.

It should not be forgotten that the omission of a formula from the British Pharmacopœia does not usually mean a condemnation of that formula; many formula which found a place in the B. P. of 1885 were omitted in 1898 for various reasons, sometimes simply because the use had declined and the article was not considered to be sufficiently important to justify inclusion in such a volume, sometimes because it was thought desirable to omit simple solutions of salts which could be made readily without burdening the official volume with directions for preparation—Lithia being a case in point. As a rule when an *alteration* in formula was required the article was *retained* in the B. P. and the new method of preparation given; those preparations which were omitted being still made by pharmacists, &c., in accordance with the 1885 Pharmacopœia. Potash Water was an exception, it having been long recognised that the standard of the 1885 Pharmacopœia (30 grains per pint) was too strong; it had, in fact, been commonly made with 10 or 15 grains per pint, being thus brought more in line with the strength of Lithia Water.

It has been suggested that a Public Analyst who adopts a standard as the result of his experience, where no special standard has been laid down by law (as in the case of milk), is passing beyond his proper sphere, but surely this is one of the purposes for which a Public Analyst exists. How have the present standards for milk and butter been brought into being if not by the work of Public Analysts and other analytical chemists who, by their experience, had arrived at these standards long before they became authoritative by law? The training and experience of an Analyst are just such as to enable him to form an unbiassed opinion as to suitable standards, indeed it would be impossible to mention any other profession more fitted to enable a man to form such an opinion.

Lord Alverstone has stated that "Analysts' certificates ought to contain particulars, so that the magistrates may have before them materials upon which they can

come to a conclusion." I submit that such particulars must include a standard in all such cases as those where the magistrates cannot be expected to know what is the ordinary or normal strength, otherwise how can the analyst's certificate be said to contain "material upon which they can come to a conclusion."

### DRUGS.

Exclusive of Lithia and Potash Waters 41 samples of drugs have been taken, 9 being unofficial samples of Tincture of Iodine, the remaining 32 official samples comprising Boric Acid Ointment 9, Sulphur Ointment 4, Compound Powder of Jalap 1, Citrate of Caffeine 4, Quinine Wine 8, and Citrate of Lithia Tablets 6. Of these only one sample was adulterated or seriously deficient in strength this being Citrate of Caffeine No. 34, which contained only 41·3 per cent. Caffeine instead of 50 per cent. One sample of Quinine Wine (No. 127) was slightly deficient in Quinine Hydrochloride.

TINCTURE OF IODINE.—Nine "test" samples gave very variable results, one sample, No. 95, was 9 per cent. deficient in both Iodine and Potassium Iodide, No. 97 contained 36 per cent. of Iodine in excess and No. 99 contained double the right proportion of both Iodine and Iodide of Potassium. The three "doubtful" samples each contained slight excess of both Iodine and Potassium Iodide, *i.e.*, from 5 to 10 per cent; it is obvious that this was not with any fraudulent intent but probably a little excess had been purposely used in order "to be on the safe side," Iodine being somewhat slow in dissolving and its tincture being a very favourite drug for Inspectors to sample.

### SELF-RAISING FLOUR.

At the time when I was writing my Annual Report for 1907 I had in hand an unfinished investigation on the use of "sulphate" powders in flour, the results of which were sent to the Sanitary Committee as a special report.

This subject being of some considerable importance and now under consideration officially I have added that report as an addendum to these notes.

I am, Gentlemen,

Your obedient servant,

R. A. CRIPPS, F.I.C.

#### ADDENDUM.

### REPORT ON THE USE OF BAKING POWDER CONTAINING SULPHATE OF CALCIUM.

TO THE CHAIRMAN AND MEMBERS OF THE SANITARY  
COMMITTEE, BOURNEMOUTH TOWN COUNCIL.

GENTLEMEN,—

In June of 1907 I received from the Inspector of Food and Drugs, 20 samples of self-raising flour for analysis and in my report I raised objection to five of these samples in consequence of the presence of considerable proportions of Sulphate of Calcium, viz., from 0·46 to 0·70 per cent.

This objection was made on the ground that Sulphate of Calcium is a chemical entirely foreign to flour, quite unnecessary for the purpose of rendering it "self-raising," and in itself objectionable in consequence of its tendency to derange the digestive organs.

Sulphate of Calcium is introduced as an impurity in Superphosphate of Calcium, which is employed in conjunction with Bicarbonate of Sodium to give the self-raising character to the flour.

In consequence of the unfavourable reports, one of the wholesale firms, who supplied the powder, raised a protest, stating that baking powder containing Sulphate of Calcium has certain advantages in use, and that the Sulphate of Calcium does not remain as such but by the process of baking is decomposed, Sulphate of Sodium being formed. They also sent two small loaves, made



respectively with Sulphate Powder and with a purer form of Superphosphate; as well as 3 samples of Superphosphate of varying quality.

The three powders (Superphosphate) gave me the following results on analysis:—

	1	2	3
	per cent.	per cent.	per cent.
Calcium Sulphate	33·5	15·8	11·4

Samples of Baking Powder were made from these and used for making special loaves which were baked under exactly similar conditions, each loaf being subsequently tested for Sulphate of Calcium, as were also the two loaves received from the wholesale firm, the results were as under:—

	Calcium Sulphate.	Crystalline Sodium Sulphate.
Wholesaler's loaf No. 1	0·27 p.c.	0·6 p.c.
= grains in 2lb. loaf ....	38	84
Wholesaler's loaf No. 2	0·15 p.c.	0·24 p.c.
= grains in 2lb. loaf ....	21	33½
Own loaf from Powder 1	0·11 p.c.	0·39 p.c.
= grains in 2lb. loaf ....	15½	55
Own loaf from Powder 2	0·064 p.c.	0·23 p.c.
= grains in 2lb. loaf ....	9	32
Own loaf from Powder 3	0·088 p.c.	0·12 p.c.
= grains in 2lb. loaf ....	12	17

These results show that by the process of baking a certain proportion (varying from about 30 per cent. to 60 per cent.) of the Sulphate of Calcium was converted into sodium sulphate and calcium carbonate, but that in no case was the whole of the calcium sulphate so converted, the average amount changed was about 50 per cent.

Assuming 50 per cent. to be changed into sodium sulphate, bread made from the 5 samples of self-raising flour previously analysed by me would contain, approximately the following proportions in a 2lb. loaf:—



	No. 144	148	150	151	157
Calcium Sulphate	20	$22\frac{1}{2}$	$29\frac{1}{2}$	25	$22\frac{1}{2}$ grains.
Sodium Sulphate					
(Crystalline)	$75\frac{1}{2}$	87	115	101	87 „

These results, together with those obtained from the small loaf No. 1, supplied by the wholesale firm are such that I cannot pass such "self-raising flour" as genuine and unadulterated; the continued ingestion of these salts in these proportions would, in my opinion, be liable to cause irritation of the stomach or intestines. If used for pastry alone the quantity eaten would not be likely to cause injury, but its use for cakes might be harmful to children who sometimes devour considerable quantities.

In my opinion 10 per cent. of sulphate would be a fair limit in "superphosphate" used for baking powder.

I am, Gentlemen,

Your obedient servant,

R. A. CRIPPS, F.I.C.



COUNTY BOROUGH OF BOURNEMOUTH.

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# REPORT

ON THE WORKING OF

The Sale of Food and Drugs Acts,

*during the Year 1908.*

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SANITARY DEPARTMENT,

BOURNEMOUTH.

TO THE MAYOR AND TOWN COUNCIL,  
BOURNEMOUTH.

GENTLEMEN,—

During the year 1908 a total of 501 samples of various foods and drugs were procured, of which number 300 samples were formally purchased in accordance with the provisions of the Acts; 100 samples were purchased informally and submitted as “test” samples to the Analyst, while the remaining 101 samples were of new milk taken by your Inspector as it was delivered by farmers to milk vendors in the Borough and then submitted by him to the “Gerber” test for milk fat, etc.

Of the 400 samples forwarded to the Analyst for analysis, 309 or 77·25 per cent. were reported to be genuine; 52 or 13 per cent. to be of poor or doubtful quality and, 39 or 9·75 per cent. to be adulterated or in some way deficient.

These results are almost identical with those for 1907 and show that the great decline in the sale of adulterated or inferior articles has been maintained during the past year.

Tables showing the various articles analysed during the year, with the results of analyses, will be found in the Public Analyst's report. Tables II. and III.

### NEW MILK.

Of 106 samples of new milk taken officially and sent to the Analyst, 100 were purchased from retail vendors in the Borough, and of these, only two were reported to be deficient in cream, viz., one 3 per cent. deficient and one  $15\frac{1}{2}$  per cent. deficient in cream. A strong letter of warning was sent in each of these cases after enquiries had been made. In the worst case— $15\frac{1}{2}$  per cent. deficiency—it was thought necessary to accept the explanation of the vendor that the deficiency was due to an accident, and although there was a doubt in the matter, legal proceedings were not taken, this being his first offence.

The other six official samples of milk were taken as delivered by the farmer to the dairymen, and all six were reported by the Analyst to be below the minimum standard for non-fatty solids.

The two worst samples, showing 10 per cent. added water in each, were taken as the basis of legal proceedings under the Acts, and ultimately this farmer was convicted and fined £5 and costs in each case.

There is no doubt that this farmer had been systematically adding water to each daily consignment of his milk, for, out of 15 churns of his milk tested by your Inspector during four consecutive days, the milk in only three of the churns was found to be genuine, the others having had water added in varying quantity. On the fourth day "official" samples were taken, and, after the delivery of part of these samples to the farmer, the addition of water to the milk ceased and the quality of the milk sent thereafter was very good indeed.

## GERBER TEST SAMPLES OF MILK,

101 samples of farmer's milk have been submitted to this test by your Inspector. The results have been such that, not only the cases mentioned above were detected, but also in other instances the quality of the milk forwarded by the farmer to the retailer in the Borough was found to be in some way not according to the minimum standards.

In such cases, action has been taken by your Inspector so that the quality of the milk sent into the Borough might be improved and, in several instances, the retail vendor worked in conjunction with your Inspector, and did all in his power to secure a better quality of milk.

In two cases your Inspector visited the farms, while in eight other cases letters of warning were written either by your Inspector or, at his instigation, by the dairyman receiving the milk.

## PRESERVATIVES AND COLOURING MATTERS.

The following table shows the number of articles analysed during 1908, which were reported by the Analyst to contain some preservative or colouring matter :—



Number of samples Analysed.	ARTICLE.	Salicylic Acid.	Boric Acid.	Sulphurous Acid.	Colour.	REMARKS.
OFFICIAL SAMPLES.						
106	New Milk ..	—	—	—	93	Annatto colouring.
31	Butter ..	—	9	—	—	0·19, 0·22, 0·23, 0·25, 0·26, 0·33, 0·38, 0·4 and 0·65 p.c.
11	Potted Meats ..	—	2	—	—	0·29 and 0·3 p.c.
	Do. do. ..	—	—	—	2	1·1 per cent. Oxide of Iron : traces of Aniline dye.
12	Sausages ..	—	8	—	—	From 0·17 up to 0·41 p.c.
12	Mince Meat ..	3	—	—	—	0·7, 1·5 and 2·8 grains per pound.
12	Jam ..	1	—	—	—	0·5 grain per pound.
UNOFFICIAL SAMPLES.						
6	Cream ..	—	6	—	—	From 0·13 up to 0·52 p.c.
15	Butter ..	—	5	—	—	From traces up to 0·43 p.c.
3	Do. Milk-blended ..	—	2	—	—	Fair quantity and 0·27 p.c.
3	Margarine ..	—	1	—	—	Fair quantity.
12	Cream Cheese ..	—	2	—	—	0·11 and 0·22 p.c.
18	Sweets ..	—	—	—	18	Various colours : 9 Aniline dye, 3 Rhodamine, 3 Oxide of Iron, 2 Theo- flavin and 1 Vegetable colour.
1	Tinned Salmon ...	—	1	—	—	0·12 p.c. in fish 0·21 p.c. in liquor.
7	Lime Juice Cordial ..	4	—	—	—	Salicylic Acid 0·87, 3·06, 3·06 and 5·25 grains per pint.
	Do. do. ..	—	—	2	—	Sulphurous Acid 1·24 and 1·24 per pint.
	Do. do. ..	—	—	—	2	Contained Aniline dye
1	Lime Juice ..	—	—	1	—	3·6 grains per pint of Sul- phurous Acid.
6	Lemon Squash ...	5	—	—	—	0·77, 1·3, 2·6, 3·4 and 4·28 grains per pint.
	Do. do. ..	—	—	1	—	Sulphurous Acid 4·96 grains per pint.
	Do. do. ..	—	—	—	1	Traces of Aniline dye.
		13	36	4	116	

### LEGAL PROCEEDINGS.

The following table shows the instances in which legal proceedings were instituted under the Sale of Food and Drugs Act, during 1908, and the results of such proceedings—

Marked No. of Sample	Article.	Extent of Adulteration.	Result of proceedings	Fines £ s. d.	Analyst's fees recoy'r'd £ s. d.	Court costs re- coy'r'd £ s. d.
192	Potash Water	80 per cent. deficient in Bicar. Potass.	Conviction	0 5 0	1 1 0	0 6 0
195	do.	78 " " " "	Withdr'n	—	—	—
196	Lithia Water	87 " " Lithium Carb.	Dismissed	—	—	—
197	do.	100 " " " "	Conviction	1 0 0	0 10 0	0 6 0
198	Potash Water	90 " " Bicar. Potass.	Conviction	0 5 0	0 10 6	0 6 0
199	New Milk	10 " added water	Conviction	5 0 0	0 10 6	0 9 0
204	do.	10 " " "	Conviction	5 0 0	0 10 6	0 9 0
272	Ground Maee	Contained 60 per cent. Wild Maee	Dismissed*	—	0 10 6	0 6 0
275	" Allspice	" about 50 per cent. " Spent " Allspice	Conviction†	—	0 10 6	0 10 0
281	do.	2 per cent. sand, and consisted of Mixed Spice	Withdr'n*	—	0 10 6	0 4 0
				<hr/> £11 10 0 <hr/>	<hr/> 4 14 6 <hr/>	<hr/> 2 16 0 <hr/>

\* On payment of costs.

† Costs only.

Number of Prosecutions	....	....	10
" " Convictions	....	....	6
" " Withdrawals or Dismissals	....	....	4
" " letters of warning written	....	....	16
Total amount of fines imposed		£11 10	0
" " " Analyst's fees			
recovered		4 14	6
" " " Court Costs ....		2 16	0

I am, Gentlemen,

Your obedient servant,

JOHN CHRISTIE,

Inspector under the Food and Drugs Acts.

